

WO 2004/030615

PCT/US2003/028547

2261/6881
FIGURE 2078

MPPRLANFCIFSRDGVFPCWPGWSQTPDLKWSTCLGLPKCWDLCPDRRGRIL

WO 2004/030615

PCT/US2003/028547

2262/6881
FIGURE 2079A

GATTGCCCCCTGTGGGTCACTTTCTCAGTCATTTTGAGCTCAGCCTAATCAAAGACTGAGGTTATGAAGTCGATC
CTAGATGGCCTTGACAGATACCACCTTCCGCACCATCACCCTGACCTCCTGTACGTGGGCTCAAATGACATTACG
TACGAAGACATCAAAGGTGACATGGCATCCAAATTAGGGTACTTCCCACAGAAATCCCTTTAACTTCCTTTAGG
GGAAGTCCCTTCCAAGAGAAGATGACTGCGGGAGACAACCCCAAGCTAGTCCCAGCAGACCAGGTGAACATTACA
GAATTTTACAACAAGTCTCTCTCGTCTTCAAGGAGAATGAGGAGAACATCCAGTGTGGGGAGAACTTCATGGAC
ATAGAGTGTTCATGGTCTGAACCCCAAGCAGCAGCTGGCCATTGCAGTCTGTCCCTCACGCTGGGCACCTTC
ACGGTCTGTGGAGAACCTCCTGGTGTGTGCGTCATCTCCACTCCCGCAGCCTCCGCTGCAGGCCCTTCTTACCAC
TTCATCGGCAGCCTGGCGGTGGCAGACCTCCTGGGGAGTGTCTTTTGTCTACAGCTTCATTGACTTCCACGTG
TTCCACCGCAAAGATAGCCGCAACGTGTTTCTGTTCAAACCTGGGTGGGGTACAGGCCCTCCTTCACTGCCTCCGTG
GGCAGCCTGTTCTCACAGCCATCGACAGGTACATATCCATTACAGGCCCTGGCCCTATAAGAGGATTGTACACC
AGGCCCAAGGCCGTGGTGGCGTTTTGCTGTATGTGGACCATAGCCATTGTGATCGCCGTGCTGCCTCTCCTGGGC
TGGAAGTGCAGAACTGCAATCTGTTTGTCTCAGACATTTTCCCACACATTGATGAAACCTACCTGATGTTCTGG
ATCGGGGTACACAGCGTACTGCTTCTGTTTATCGTGTATGCGTACATGTATATTCTCTGGAAGGCTCACAGCCAC
GCCGTCCGCATGATTACAGCGTGGCAGCCAGAGAGCATCATCCACACGTCTGAGGATGGGAAGGTACAGGTG
ACCCGGCCAGACCAAGCCCGCATGGACATTAGGTAGCCAAGACCCCTGGTCTGATCCTGGTGGTGTGATCATC
TGCTGGGGCCCTCTGCTTGCAATCATGGTGTATGATGTCTTTGGGAAGATGAACAAGCTCATTAAAGACGGTGT
GCATTCTGCAGTATGCTCTGCCTGCTGAACTCCACCGTGAACCCCATCATCTATGCTCTGAGGAGTAAGGACCTG
CGACACGCTTTCCGGAGCATGTTTCCCTCTTGTGAAGGCACTGCGCAGCCTCTGGATAACAGCATGGGGGACTCG
GACTGCCTGCACAAACACGCAACAATGCAGCCAGTGTTCACAGGGCCGAGAAAGCTGCATCAAGAGCACGGTC
AAGATTGCCAAGGTAACCATGTCTGTGTCCACAGACACGTCTGCCGAGGCTCTGTGAGCCTGATGCCTCCCTGGC
AGCACAGGAAAAGAATTTTTTTTTTAAAGCTCAAAATCTAGAAGAGTCTATTGTCTCCTTGGTTATATTTTTTA
ACTTTACCATGTCTCAATGAAAAGGTGATTGTACCATGATCACTTATCAGTTTGCTAATGTTTCCATAGTTTAGG
TACTCAAATCCATTCTCCAGGGGTTTACAGTGAAGAAAGCCTGTTGTTTAAAGTACTGAACGATCCTTCAAAGT
CTCAATGAAATAGGAGGGAACCTTTGGCTACACAATTGGAAGTCTAAGAACCCTGGAAGAAATGCCATCAAATG
AATAATGCCCTTTGTAAACCAACTTTCACTATAATGTGAAGTAACTGTCCGTAGTATCAGAGATGTCCATTTT
TACAAGTTATAGTACTAGAGATATTTTGTAAATGTATTATGTCTGTGAGATGTGTATCAGTGTTTATGTGCTA
TTAATATTTGTTTAGTTTACGAAAACCTGAAAGGTAGACTTTTATGAGAACAATGGACAAGCAGTGGATACGTGTC
AATGTGTGCACTTTTTTTCTATATTATTGCCCATGATATAACTTTAGAAAATAAACCTTAATATTTCTTCAAATAT
CTCTATTTAATTTTACACTGAAATAACCGTAAAGGTTTATTTTCTGTTACCTCAACAAGAAGAATTTGAAGAC
TTCAAATATTGAGCAGAATTCATTCTACTTTAAAAATTTATTAGCCCTGCATTTTTCATAGGAAGACACATTATC
TTCTGGACTATAGCTGTTCTAATGGATTATAATCAGAATGGAAGAGAGAAAAGCATATTGACTTTTTTTGAGCGAC
ATCTCTGACTTTCTTTAGTCTTTAGCTATTACTGGATCTCTTAAGACAGCATGTGTTAATCTTAATGTATATCGT
TATCACTGTGCAGTTGCTGTTTACTTGAATAGTATTGTGTTTCTATATTCCAGGTTTAAAGTAGATTTTCATGCCTG
GGTGGCCAAACAACAGTCTTCATTTTTTTTAAATTGAAAAGAAGTAGTGTCTGGATCAGTAAAATTATACTGTGTG
TGAGTGTGAATATAAATGTGTGTATGTGTGTTTCTGTCTGTAACCTGTTACAGTAATGTATATAAAGTGAGAAAAC
TGTGACCAAGTATAAATTTTACCCTTGTGCACTCTTGACATGGATTTCAGTTTCTAAAATTGAGTTCTTCTCT
GTAATCTTGTGATAAAAATACTGACTCCAACCATTCAAAAATTTACCCCATCCCTCCTTAAGAGATTGGATCA
AGTATTACTAAATTGACCTTTAGGTATTACACAAGACCAGTGCTTAGCAAAAAATAATGACAGGCATCCAAGGAA
GGGATGTATTTGTAGTGTATTGTCAGGAAAGGAGAGTACTTTGGTTTCTGAGCACCGAATATTGAGCAATATGT
CAGTCACTAAAAGGAAGACAGTTCTACAGAAAAACAATGGTAACATTTTCAATAGCGTGTGTAGATAGTATGCA
CTATATACATCACGTTAAAGTAGGACTATCACACCCAGCCATGTGGCTAAAAAAGCTGAATCAGACAGTGGATG
AGACACACAACGGCAGTGAAGAACCGATACACTTGGCATTGACGTCTAGCTATGCTGTATCTGTGCTTTGCCAC
ATGCCCTTGGTGACAGCTGAGCACCCAGCTCTGTCTTGGTAGGTTTGGGCTAAGGAACAAATCTCTCCTTTGCTC
GTGGTTAGCAAGATACACTCAAGCATGAAGATAAACACAGCTGCTTTCTTCTTACACCCCGGTCTCATGCTCCTT
AATGGCGCCATGGGTGCTTGTGCGCCTTTTCCAGTAAGGAATGATATTGCTGAAGAATCTACTTAACCCTGAC
AAATTTTAATTATAATCTCTTCTTATACAGATAAAACATGACTCCTACAAGGCCCAAGGTTTACATAGTCTGAA
GTGAAGTACAGAGCTGGCATCTATCTGGTGATTCTAGCTCTCGAGATACCAAGCAGCCTGATGGGGCAGTTCC
CCTTCTTACGGTTCACGCTCTAAGGCAGGATGTGGCTTATGAGATACTTTGCATTGTCTGTCTGCACACCTTGAA

WO 2004/030615

PCT/US2003/028547

2263/6881
FIGURE 2079B

TCTGCCTGCTGGCTCCCTTACTTTACCTCTCTGTTCATGTGCAGATGAAGGCTCAGGGTGCTAGAGGATTAGTAAG
ATCTCTTTCTAAAGACAGGAGAGATTATTTACAAGAAGAACTCACCAGGGTTTAGTTTGCAATTAAGAATTGCCA
GTCTTTTGTCTGCATCATCTTGAACATTAATCCACATGTTTCAGAGCTCACCAGGCAGTACCAATGCTCTTTTC
ACAGCTATGAAGAGCTAGAGAAATTCCTGTTATGGTAGAAAAATTCACGATTCATTTTTGAACTGCATTTGTG
CGTATGCAGTGTAGATTTTATAGTGTGTTGTGCTTTCAAGATCTAAATCATATATAATAAATTAAGGGACAAATGG
GGCTGACAGCACTAACTTGGTGCTTATTGATATTCTAAGAAATATCTGTGAAATATCATCACGTATGTTATACA
ACCTTCATTTAAAAAGGTTTAAACTAGTTAGATTACCTTTGACACTTTTCATATCATTTCCTTAACCCCAAGTGAC
GAAAACATTGTCCCAATGAATATACTCATTAGAATTACCATTTGTTAATATCACTCATTAAATTAACCCCAATAAT
TAGATCCATTAATTTAAATGATTTAAATTTAAGTAAGTTTATAAGGCTGACATCAGAGGTATCTTACTTTCCCT
CTGAGGATGATGTACTTGCCCTGACCATGCATTTTACCATCACACATGTTTCAGAAAGGGCCAAATTCCTCAACCTG
CTCATTTTTTTTTTATCAGAGTCATGATGAATCAGTCCTAGAATGTTTCATTTGCACAAGTAGGGCTGCCTCCAA
GAGGAACCTCTGATTTATTTTGTATGAAATATATGTGAAAGGATATGAATCTGAGAGATGCTGTAGACATCTGTC
CTACACTTGAGATGATTTCCAAGCCTCTCTGGCACTTTGAGTTAAGTCTATCTGGTATTAAATGCCAAGGACCTT
TTGCTGCCTAAATCCACTCTGCAGGAAATAGGCCCAACCACCAGATGAGAATTAGGCCCTGGATGAGTAGCGCTA
TAGTTACTGTCTGTGTTGATTAATTTCTGCCATTTTCATGTCCATAAAAGAGACCACCCATATCATGCACACAATTA
GATTTCTCACACTCTAACTGTATATTTGTATGATATTTTAAATCTCCTAAATGCTGGGCAATGGCTATTAAACAA
TTAATTGTCTTGCCTGGCCTTCTGATGAAATGTTAACAATGCCTATTGTAATATAGAAAAAACATTCTATCTA
CTGATTTGGGCTGAATGTATGTAAATAGGTTTCTAAAAAGTCAGATGTTTGAGCAGTGGCCTACAAATCAGTAAT
TTTCGGATGGGAGAGTTTCTTTACATTGCCGTGGCATCTTAAAAGCTATCTTCATGTAAATTGACTGTACTAGGC
CTACTGGGGATCAGAGTTCCCAAGAAAGGAAACCTTTTCTTGATCTGGATTCAAATTTATTTCCAATGTTTCAA
GCGGGAACATGACTCTTTATTGTCTGTAAATCTAACATTATTACTTTTCTCTTAGAAGAATATTGTATTGTTA
GATGTTTGTGAGCTGGTAACATCGTTGCAACCACTGCAATATCTTCGTTAGTAATCTGTATAATACTTTGTATA
CAAGTACTGGTAAGATTGTTATTAAATGTAGCTTCAGTCATTAAATTACTATAGCAAAGTAGTACTTCTTCTGTA
ATATTTACAATGTATTAAGCCACAGTATATTTTATTCAATGTAATTAACTGTAACTTATTCAAAGAGAAAA
CATCTCATCATGTCTATTGTCCAAAGTTACCTGGAATCAAATAAAAAATCTAGATTACCATGAAGAACATA

WO 2004/030615

PCT/US2003/028547

2264/6881
FIGURE 2080

GAGCGCGGTTACCGGACGGGCTGGGTCTATGGTCGCTCCGCGGGCCGCTCCGCCGGCTGGTGCTTTTTTATCAGG
GCAAGCTGTGTTCCATGGCAGGGAACTTTTGGCAGAGCTCCCACTATTTGCAATGGATTTTGGATAAACAAGATC
TGTTGAAGGAGCGCCAAAAGGATTTAAAGTTTTCTCTCAGAGGAAGAATATTGGAAGTTACAAATATTTTTTACAA
ATGTTATCCAAGCATTAGGTGAACATCTTAAATTAAGACAACAAGTTATTGCCACTGCTACGGTATATTTCAAGA
GATTCTATGCCAGGTATTCTCTGAAAAGTATAGATCCTGTATTAATGGCTCCTACATGTGTGTTTTTGGCATCCA
AAGTAGAGGAATTTGGAGTAGTTTCAAATACAAGATTGATTGCTGCTGCTACTTCTGTATTAAAACTAGATTTT
CATATGCCTTTCCAAAGGAATTTCTTATAGGATGAATCATATATTAGAATGTGAATTCTATCTGTTAGAACTAA
TGGATTGTTGCTTGATAGTGTATCATCCTTATAGACCTTTGCTCCAGTATGTGCAGGACATGGGCCAAGAAGACA
TGTTGCTTCCCCTTGCAATGGAGGATAGTGAATGATACCTACAGAACGGATCTTTGCCTACTGTATCCTCCTTTCA
TGATAGCTTTAGCTTGCCTACATGTAGCCTGTGTTGTACAGCAGAAAGATGCCAGGCAATGGTTTGCTGAGCTTT
CTGTGGATATGGAAAAGATTTTGAAATAATCAGGGTTATTTTAAACTATATGAGCAGTGGAAGAATTTTCGATG
AGAGAAAAGAGATGGCAACCATTCTTAGTAAGATGCCAAAACCAAACCACTCCAAACAGTGAAGGAGAGCAGG
GTCCAAATGGAAGTCAGAACTCTAGCTACAGCCAATCTTAAACATTCCGAAGAATTCATAGTGGACCACTTGG
AAATAAACCAATTGGACAGATTTTCAGTAATGTCTTCAGTGGAACACAAATGAAATGAATAGCTTGTCTGTCAA
GCATATTGGAAAGTGATTTTATTTTGCAAAATAAGTTTTCTTTAATATGATTCTAGTACATAATTGATTAAAA
TCTCTTGATTATAAATGTTTGGAAGGTTCTAAGGGGACCTACAGACAGACATACATAGACATTTCAAAATTAAT
AGCTTTTGATTAGTATAATATTTCTTAATTTGGATAATAAAAATTGTAGCTTTTTTATTAAGCCAGGAAACATGAA
GCATAATTTGTTTAAATTTCTTTGGTTCATTGAGGGACCAAAAAGGACGTAAAAATTTACAGTCAATCTATGAG
GGTTTTTTTCCCTCCATAAGTTTAACTTTAAACTGTATTTAAGGAATCAAATCTTACAAAATCCTGGAAGATTT
TGGTAATGATGTTGATAATTTCAGGGAAATTAATCAAGTACCTATATTGATTTAAAAGTGATTTTATTCAGTAG
TTTGAGG

WO 2004/030615

PCT/US2003/028547

2265/6881
FIGURE 2081

AGTCTCCCCAGGTTGTAGACGCTGCGGCCCCGGCCCCGGCGGGTAAATAACAGATGCGGGTGAAAGATCCAACATAAA
GCTTTACCTGAGAAAGCCAAAAGAAGTAAAAGGCCTACTGTACCTCATGATGAAGACTCTTCAGATGATATTGCT
GTAGGTTTAACTTGCCAACATGTAAGTCATGCTATCAGCGTGAATCATGTAAAGAGAGCAATAGCTGAGAACTCTG
TGGTCAGTTTGCTCAGAAATGTTTAGAAGAAAGAAGATTCTATGATGGGCAGCTAGTACTTACTTCTGATATTTGG
TTGTGCCTCAAGTGTGGCTTCCAGGGATGTGGTAAAACTCAGAAAGCCAACATTCATTGAAGCACTTTAAGAGT
TCCAGAACAGAGCCCCATTGTATTATAATTAATCTGAGCACATGGATTATATGGTGTTATGAATGTGATGAAAAA
TTATCAACGCATTGTAATAAGAAGGTTTTGGCTCAGATAGTTGATTTTCTCCAGAAACATGCTTCTAAACACAA
ACAAGTGCATTTTCTAGAATCATGAACTTTGTGAAGAAAAATGTGAAACAGATGAAATACAGAAGGGAGGAAAA
TGCAGAAATTTATCTGTAAGAGGAATTACAAATTTAGGAAATACTTGCTTTTTTAATGCAGTCATGCAGAACTTG
GCACAGACTTATACTCTTACTGATCTGATGAATGAGATCAAAGAAAGTAGTACAAAACCTCAAGATTTTTCTTCC
TCAGACTCTCAGCTGGACCCATTGGTGGTGGAACTTTCAAGGCCTGGACCACTGACCTCAGCCTTGTTCTCTGTTT
CTTCACAGCATGAAGGAGACTGAAAAAGGACCACTTTCTCCTAAAGTTCTTTTTTAATCAGCTTTGTCAGAAGCGG
GTGCATCTACATTTAATAATAATAATTATGAGTTACAAAATACTAATGTATTTCATCATTTAACATGAATAGTCGT
TTTTACTGTAACTTTGCTCTTATTGCCCTGACTATGAAGAGAACTAAAATTTGTTACAGCTCTATGCTTTATGAA
AATTATATCTCAGTCCTCAGAAGAAGCAGCTTATCCTCATATATAAGGAAATGGAGACACAGAAATTAAATGGCT
CACCTAGTCTGAGTGAAAAGCTGAGAATCAAATGGAGATCTGTCCTGACTTGGATGCCTATGTTGTAATACCATA
AAGTGAGAAAACCATAGAGTTGTAAAACTAGAAAGTACCGTAAGATAACATCTAATCTAGCTTTCTTATTTTAA
AAGATGAGCTGTGAGGCAATAGAGTTTAAAGTGAATTTCTCAAGGTATTACAGTATGTTTAAAAACCAATCCTT
ATGTGCCTGGAAATAAACACATAAAGGATCTGACTTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2266/6881
FIGURE 2082

MRVKDPTKALPEKAKRSKRPTVPHDEDSSDDIAVGLTCQHVSHAISVNHVKRAIAENLWSVCSECLEERRFYDGO
LVLTSDIWLCCLKCGFQGGKNSSEQHSLKHFKSSRTEPHCIIINLSTWIIWCYECDEKLSTHCNKKVLAQIVDFL
QKHASKTQTSAFSRIMKLCEEKCETDEIQKGGKCRNLSVRGITNLGNTCFFNAVMQNLAQTYTLTDLMEIKESS
TKLKIFPSSDSQLDPLVVELSRPGPLTSALFLFLHSMKETEKGPLSPKVLFNQLCQKRVHLHLI

WO 2004/030615

PCT/US2003/028547

2267/6881
FIGURE 2083

AGTTTGTGCTCCACCGAGTTCTGAAGAAGCCAGCAGCTCGCTGCTTAAAATTAAACCACAGGGTTCCATGAT
GGGTCAACTTGATGGGAAAGTCATCATCCTGACAGCCGCTGCTCAGGGGATTGGCCAAGCAGCTGCCTTAGCTTT
TGTAAGAGAAGGTGCCAAAGTCATAGCCACAGACATTAATGTGTCCAACTTCAGGAACTGGAAAAGTACCTGGG
TATTCAAACTCGTGTCCTTGATGTCACAAAGAAGAAACAAATTGATCAGTTCGCCAATGAAGTTGAGAGACTTGA
TGTTCTCTTTAATGTTGCTGGTTTTGTCCATCATGGAAGTGTCTGGATTGTGAGGAGAAAGACTGGGACTTCTC
GATGAATCTCAATGTGCGCAGCACGTACCTGATGATCAAGGCATTCTTCCTAAAAATGCTTGCTCAAAAATCTGG
CAATATTATCACCATGTTTTCTGTGGTTTTCCAGCATCAAAGGAGTTGTGAACAGATGTGTGTACAGCACAAACCA
GGCAGCCGTGATTGGCCTCACAAAATCTGTGGCTGCAGATTTTCATCCAGCAGGGCATCAGGTGCAACTGTGTGTG
CCCAGGAACGGTTGATACGCCATCTCTACAAGAAAGAATACAAGCCAGAGGAAATCCTGAAGAGGCACGGAATGA
TTTCCTGAAGAGACAAAAGATGGGACGATTTGCAACTGCAGAAGAAATAGCCATGCTCTGCGTGTATGTGGCTTC
TGATGAATCTGCTTATGTAAGTGGTAACCCTGTCATCATTGATGGAGGATGGAGCTTGATTTTAGGATCTCCA
TGGTGGGAAGGAAGGCAGGCTCTTCCTATCCACAGTGAACCTGGCTATGAAGAAAACACCAATCATCTCCTTC
CTGCTAATCACATGTTAATGAACTAAGCCCTTTTTAACAATGTCAGTGTGCAAGAGTCTGATTCTTTAAGTA
TATTAATCTCTTTGTAATCTCTTCTGAAATCATTGTAAAGAAATAAAAATATTGAAGTACAGCAAGAGAATAGT
TTTTAAAATAAATCTCAATTTGTAAGC

WO 2004/030615

PCT/US2003/028547

2268/6881
FIGURE 2084

MGQLDGKVIILTAAAGIGQAAALAFVREGAKVIATDINVSKLQELEKYLGIQTRVLDVTKKKQIDQFANEVERL
DVL FNVAGFVHHGTVLDCEEKDWDFSMNLNVRSTYLMIKAF LPKMLAQKSGNIITMFSVSSIKGVNRCVYSTT
KAAVIGLTKSVAADF IQQGIRCNCVCPGTVDTPSLQERIQARGNPEEARNDFLKRQKMGRFATAEEIAML CVYVA
SDESAYVTGNPVIIDGGWSL

WO 2004/030615

PCT/US2003/028547

2269/6881
FIGURE 2085

ATGAATGCTATAAAGAGATTT CAGGATGGAAAATTAGTACAGAACAAAGCCTACTGTGGAGAATCAACACCACAG
CATTTCACAGGCCTGCAGCCTTATGTGGTTAGCATGGATGAGGGTTCTTCAGGTTTCATGAGAATAGGCTATGAA
CACTGGGTTTTGGICTTCTTGATTCTCAGTGCCTGGATACCAGAAAAAGAGAAATATGAGATTGCAGAGCAGCCC
AAGATTGATCAGAAAGCTGTGGACTCACAAATTTTACCAAAAATCAAAAGTATTCCTCAGCTCCAGTGCTACCTG
CGATCTGTGTTTGCTCTGACGAATGGAATTTATCCTCACAAATTGGTGTTTTAA

WO 2004/030615

PCT/US2003/028547

2270/6881
FIGURE 2086

MNAIKRFQDGKLVQNKAYCGESTPQHFTGLQPYVVSMDGSSGFMRIGYEHWVLVFLILSAWIPEKEKEYEIAEQP
KIDQKAVDSQILPKIKSIPQLQCYLRSVFALTINGIYPHKLVF

WO 2004/030615

PCT/US2003/028547

2271/6881
FIGURE 2087

ACAATCCAGCCAATGGCAGAAGACTGCCGGAAATGTAGAAGAGTTAAGTGTGTGTCCTATGCGTTCTACCTCAAT
GCAGATATCAGAGTCCCTTTGAGCTCCCTGAAGAATATACTCACACCAAAGTATTACCTGCACATAGCTGCTCCC
TTCCACCTCGCGGCAGTTCAAATGAAGCTGTTGTCATTTCTGGAAGGAACTAGCCCAGCAGATCAAGCAGAAA
GTGCGGCAGGAGGTGGAAGAGTGGGTGGCCTCAGGCAACAAACCTGAGCATGATCCTGTACCTGCTGCTATAGTT
CCAGCAAAAAAGATGACTTCTTGCAGGCAAGAAGGCTCCAGCCCAGAAGGTTCTGCCCAGAAAGCCACAGGCTA
GAGGCAGTGCCTCCTCTGAAAGCTCAGAAGTTTCAAAGCAACGTGCCCAGAAAGCATGTTGTCCAAAAGCATCT
GGCAAGAAAGCGTTAAGAGGCTATTATAAAAGTAGTAAAGGGTCCAACAACCTTCAAGGACAAGAATGATGTATTT
TCATCACTTGTGACTTCCGGTTTCCTAGACCAGATTTCCGGTCCGGTCTGACCAGGTGCAGCCCCATCCTAGCAGC
AGATTGCTTGTTCTCAGCATTCCTCATGGAGAATCTTAGTGTGGTGGGAGGCTTGGGAAATACCGTTTTCAA
GACCAGTGGATTAGTAGCCTGAAAACTCGCCAGCAGTTGCCTGCTTTTGTTCATCTTCTGTCTCTGGAAGAGCAC
CTGATCCTCACTACCAAAAACTAA

WO 2004/030615

PCT/US2003/028547

2272/6881
FIGURE 2088

MAEDCRKCRRVKCVSYAFYLNADIRVPLSSLKNILTPKYYLHIAAPFHAAVQNEAVVISGRKLAQQIKQKVRQE
VEEWVASGNKPEHDPVPAAIIVPAKKMTSCRQEGSSPEGSCPESHRLEAVPPLKAQKFQKQRAQKACCPKASGKKA
LRGYKSSKGSNNFKDKNDVFSSLVTSGFLDQISGRSDQVQPHPSRLLVLSIPIMENLSVVGGLGNTVFKDQWI
SSLKTRQQLPAFVIFLSLEEHLILTTKN

WO 2004/030615

PCT/US2003/028547

2273/6881
FIGURE 2089

ACCTGATGGAGATCCAAGTGTGTTGGGCAGGATGAGATGATCGACGTCATTGGGGTGACCAAGGGCAAAGGCTACA
AAGGGGTCACCAAGTCGTTGGCACACCAAGAAGCTGCCCTGCAAGACCCACCGAGGCCTGTGCAAGGTGGCCTGTA
TTGGGGCATGGCATCCTGCTCGTGTGGCCTTCTCTGTGGCACGTGCTGGGGAGAAAGGCTACCGTCACCGCACTG
AGATCAACAAGAAGATCTATAAGATTGGCCAGGGCTACCTTATCAAGGATGGCAAGCTGATCAAGAACAATGCCT
CCACTGACTCTGACCTGTCTGACAAGAGCACCAATCCTCTGGGTGGCTTTGTCCACTATGGTGAAGTGACCAATG
ACCTTGTCATGCTGAAAGGCTGTGTGGTGGGAACCAAGAAGCGGGTGCTCACCTCCACGAGTCCTTGCTGGTGC
AGATGAAACGGCAGGCTCTGGAGAAGATTGACCTTAAGTTTCATTGACACCACCTCCAAGTTTGGCCATGGCTGCT
TCCAGACCATGGAGCAGAAGAAAGCATTTCATGGGACCACTCAAGAAAGACGGAATTGCAAAGGAAGAAGGAGCTT
AATGCCAGGAACAGATTTTCGCAGCTGGTGTGGTCTCAATAAAAGTTATTTTCCACTGGGAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2274/6881
FIGURE 2090

GCGTGATGTCTCACAGAAAGTTTTCTGCTCCCAGACATGGGTCCCTCGGCTTCCTGCCTCAGAAGCGCAGCAGCA
GGCATCGTGGGAAGGTGAAGAGCTTCCCTAAGGATGATCCGTCCAAGCCGGTCCACCTCACAGCCTTCCTGGGAT
ACAAAGCTGGCATGACCCACATCATGAGGGCTCTGGAGAAGATTGACCTTAAGTTCATTGACACCACCTCCAAGT
TTGGCCATGGCTGCTTCCAGACCATGGAGCAGAAGAAAGCATTTCATGGGACCACTCAAGAAAGACGGAATTGCAA
AGGAAGAAGGAGCTTAATGCCAGGAACAGATTTGCGCAGCTGGTGTGGTCTCAATAAAAGTTATTTTCCACTG

PCT/US2003/028547

AACAGGAAGACGGGCCCTCCCGGCTTCGGAGAGCGCCGCCACTCATCTCTGCCAGCTGCTGCCCTCCCGAGGAGGC
 CTCCATGGCTTACCTACCTCCACCAACCCAGCGCATGCCACTTTGAGAGCTTCTGTCAGGCCAGCTGTGCCA
 GGACGTGCTGAGCAGCTTCCAGGAGCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGGCTGCCCCAGTACCA
 CAAGATCAAGGACCAGCTCAACTACTGGAGCGCCAAGTCACTGTGGACCAAGCTGGACAAGCGAGCAGGCCAGCC
 TGTCTACCAGCAGGGGCCGGGCTGCACCAGCACCAAGTGCTGGTGGTGGGTGCTGGACCTTGCGGGCTGCGGGT
 CGCTGTGGAGCTGGCGCTGCTGGGGGCCGAGTGGTGCTGGTGGAAAAGCGCACCAAGTTCTCTCGCCACAACGT
 GCTCCACCTCTGGCCCTTACCATTCCACGACCTGCGGGCACTCGGTGCTAAGAAGTTCTACGGGCGCTTCTGCAC
 CGGCACCCTGGACCACATCAGCATCAGGCAGCTCCAGCTGCTTCTGCTGAAGGTAGCATTGCTGCTGGGGGTGGA
 AATTCAGTGGGGTGTCACTTTCACTGGCCTCCAGCCCCCTCCTAGGAAGGGGAGTGGCTGGCGTGCCAGCTCCA
 ACCCAACCCCCCTGCCAGCTGGCCAACTATGAATTTGACGTCTTATCTCGGCTGCAGGAGGTAAATTCGTCCC
 TGAAGGCTTCAAAGTTCGAGAAAATGCGAGGCAAACCTGGCCATTGGCATCACAGCCAACTTTGTGAATGGACGCAC
 CGTGGAGGAGACACAGGTGCCGGAGATCAGTGGTGTAGCCAGGATCTACAACCAGAGCTTCTTCCAGAGCCTTCT
 CAAAGCCACAGGCATTGATCTGGAGAACATTGTGTACTACAAGGACGACACCCACTACTTTGTGATGACAGCCAA
 GAAGCAGTGCTGCTGCGGCTGGGGGTGCTGCGCCAGGACTGGCCAGACACCAATCGGCTGCTGGGCAGTGCCAA
 TGTGGTGCCCGAGGCTCTGCAGCGCTTTACCCGGGCAGCTGCTGACTTTGCCACCCATGGCAAGCTCGGGAACT
 AGAGTTTGCCAGGATGCCCATGGGCAGCCTGATGTCTCTGCTTTGACTTCACGAGCATGATGCGGGCAGAGAG
 TTCTGCTCGTGTCGAAGAGAAGCATGGCGCCCGCTGCTGCTGGGACTGGTGGGGGACTGCCTGGTGGAGCCCTT
 CTGGCCCCCTGGGCACTGGAGTGGCACGGGGCTTCTCTGGCAGCCTTTGATGCAGCCTGGATGGTGAAGCGGTGGGC
 AGAGGGCGCTGAGTCCCTAGAGGTGTTGGCTGAGCGTGAGAGCCTGTACCAGCTTCTGTACAGACATCCCCAGA
 AAACATGCATCGCAATGTGGCCCAGTATGGGCTGGACCCAGCCACCCGCTACCCCAACCTGAACCTCCGGGCAGT
 GACCCCCAATCAGGTACGAGACCTGTATGATGTGCTAGCCAAGGAGCCTGTGCAGAGGAACAACGACAAGACAGA
 TACAGGGATGCCAGCCACCGGGTCGGCAGGCACCCAGGAGGAGCTGCTACGCTGGTGCCAGGAGCAGACAGCTGG
 GTACCCGGGAGTCCACGTCTCCGATTTGTCTTCTCTCTGGGCTGATGGGCTAGCTCTGTGTGCCCTGGTGTACCG
 GCTGCAGCCTGGCCTGCTGGAACCTCAGAGCTGCAGGGGCTGGGAGCTCTGGAAGCAACTGCTTGGGCACTAAA
 GGTGGCAGAGAATGAGCTGGGCATCACACCGGTGGTGTCTGCACAGGCCGTGGTAGCAGGGAGTGACCCACTGGG
 CCTCATTGCCTACCTCAGCCACTTCCACAGTGCCTTCAAGAGCATGGCCACAGCCCAGGCCCTGTACGCCAGGC
 CTCCCCAGGGACCTCCAGTGCTGTATTATTCTTCTAGTAACTTCAGAGGACCCTGCAGCGATCCCGGGCCAAGGA
 AAATGCAGAGGATGCTGGTGGCAAGAAGCTGCGCTTGGAGATGGAGGCCGAGACCCCAAGTACTGAGGTGCCACC
 TGACCCAGAGCCTGGTGTACCCCTGACACCCCATCCCAACACCAGGAGGCCGGTGTGGGGACCTGTGTGCACT
 TTGTGGGGAACACCTCTATGTCTTGAACGCCTCTGTGTCAACGGCCATTTCTTCCACCGGAGCTGCTTCCGCTG
 CCATACCTGTGAGGCCACACTGTGGCCAGGTGGCTACGAGCAGCACCCAGGAGATGGACATTTCTACTGCCTCCA
 GCACCTGCCCCAGACAGACCACAAAGCGGAAGGCAGCGATAGAGGCCCTGAGAGTCCGGAGCTCCCCACACCAAG
 TGAGAATAGCATGCCACCAGGCCTCTCAACTCCACAGCCTCGCAGGAGGGGGCCGGTCTGTTCAGATCCCGAG
 CCAGCCCACCCGTGCGCAGATCCGCCTCTCCAGCCCGAGCGCCAGCGGTTGTCTCCCTTAACCTTACCCCTGA
 CCGGAAATGGAGCCTCCACCCAAGCCTCCCCGCAGCTGCTCCGCCTTGGCCCGCCACGCCCTGGAGAGCAGCTT
 TGTGGGCTGGGGCTGCCAGTCCAGAGCCCTCAAGCTCTTGTGGCCATGGAGAAGGAGGAAAAAGAGAGTCCCTT
 CTCCAGTGAAGAGGAAGAAGAAGATGTGCCTTTGGACTCAGATGTGGAACAGGCCCTGCAGACCTTTGCCAAGAC
 CTCAGGCACCATGAATAACTACCCAACATGGCGTCGGACTCTGCTGCGCCGTGCGAAGGAGGAGGAGATGAAGAG
 GTTCTGCAAGGCCAGACCATCCAACGGCGACTAAATGAGATTGAGGCTGCCTTGAGGGAGCTAGAGGCCGAGGG
 CGTGAAGCTGGAGCTGGCCTTGAGGCGCCAGAGCAGTTCCCCAGAACAGCAAAAGAACTATGGGTAGGACAGCT
 GCTACAGCTCGTTGACAAGAAAAACAGCCTGGTGGCTGAGGAGGCCGAGCTCATGATACGGTGCAGGAATTGAA
 TCTGGAGGAGAAACAGTGGCAGCTGGACCAGGATACGAGGCTACATGAACCGGGAAGAAAACCTAAAGACAGC
 TGCTGATCGGCAGGCTGAGGACCAGGTCTGAGGAAGCTGGTGGATTGGTCAACCAGAGAGATGCCCTCATCCG
 CTTCCAGGAGGAGCGCAGGCTCAGCGAGCTGGCCTTGGGACAGGGGCCAGGGCTAGACAGGGGTGGGCCGTCT
 GCTTTCGTTCCACAAAGAAAGCACCTCACCCAGCACAGTGCCACCCCTGTTTCATCTGGGCTGCCTGGCAGAGA
 GCCTTGCTGTTTACAATTAAAAATGTTTCTGCCAC

WO 2004/030615

PCT/US2003/028547

2276/6881
FIGURE 2092

GTTCCGGCGCACGTAATCGCCGAGGGCACGTGCATGCCCCCTGGTTAAGAGTTGCAGGTAGCGGTAGCGATGGAC
ACTCTGGATCGAGTAGTAAAGCCCCAAAACGAAAAGAGCCAAGAGATTCTTGAGAAGAGAGAACCGAAACTCAAT
GAAAATATTAAAAATGCCATGCTGATTAAAGGGGGAAATGCAATGCAACAGTGACAAAAGTACTTAAAGATGTG
TATGCACTGAAAAAACCATACGGTGTACTATATAAAAAGAAAAATATTACAAGACCTTTTGAGGATCAGACATCA
CTGGAATTCTTTTCAAAGAAGTCAGATTGTTCTTTATTCATGTTTGGCTCCCATAATAAGAAGCGGCCAAATAAT
CTAGTAATAGGTCGTATGTATGACTACCATGTGCTGGATATGATTGAATTAGGTATTGAGAATTTTGTCTCTCTA
AAAGACATTAAGAACAGTAAATGTCCTGAGGGAACAAAACCCATGCTGATATTTGCTGGCGATGATTTTCGATGTA
ACAGAAGATTATAGAAGACTAAAAAGTCTTCTTATTGATTTCTTCAGAGGCCCCACAGTATCAAATATCCGCCTG
GCTGGATTAGAGTATGTTCTGCACTTCACTGCACTGAATGGGAAGATTTACTTTCGAAGCTATAAGTTGCTGTTG
AAGAAATCTGGTTGCAGAACACCACGGATTGAATTGGAAGAGATGGGACCCTCATTGGATCTGGTTCTGAGGAGG
ACACACCTGGCATCGGATGACCTTTATAAATTATCTATGAAAATGCCAAAAGCTCTCAAGCCAAAGAAGAAGAAA
AATATTTCCCATGATACTTTTGGTACAACCTTATGGAAGGATTCATATGCAGAAGCAAGACCTAAGCAAACCTACAA
ACCAGGAAAATGAAGGGGTTGAAGAAGCGACCTGCAGAAAGGATAACAGAAGACCACGAGAAAAAGTCAAAAAGA
ATTAAAAAAAATTGATGGAACCTTAGCCAGCCACTACTGTTTCATTGTGTTCTACTTAAGAGAATTATCAAGCGTC
AATCCATTTCAGAGTTTCTTATAAGATCTTATTATATATTTTTATAACATGATAATTTTACGATATATTATTATGA
ACAGTAATATACTAGTATTAAGTGTAAGTAAGCCTTTTATTTGAGACATTACACCCTGGTGTGCCATTTTCTCT
TGTGATATCCCCCTGCCCTCCACAAATTCTTCTTCTCATTGGGTGGATGGATGGGTGAGGAGGATCTCCATAAC
CATTGGGATTTTTTTGAATTTCTGGCCTTAGCTAAAGAAAGCCACAGAAAGCCGGACCCGCAGGAGCTGTGTAAA
CAATCTCAGTATGAATTACCTGGAAAGTTAACCTCCTCTCCCAACATGGATCTACATTCTGATTTTTATTTTCTA
CTTTTATTTTGCTGAAATCCTACTCGTTGACATTTGAGATTTTAAGCTTTGTGGCTGAAAATATATAGATCTCT
GAG

WO 2004/030615

PCT/US2003/028547

2277/6881

FIGURE 2093

MDTLDRVVKPKTKRAKRFLEKREPKNENIKNAMLIKGGNANATVTKVLKDVYALKKPYGVLYKKKNITRPFEDQ
TSLEFFSKKSDCSLFMFGSHNKKRPNNLVIGRMYDYHVLDMIELGIENFVSLKDIKNSKCPEGTKPMLIFAGDDF
DVTEDYRRLKSLIDFFRGPTVSNIRLAGLEYVLHFTALNGKIYFRSYKLLKKSGCRTPRIELEEMGPSLDLVL
RRTHLASDDLYKL SMKMPKALKPKKKKNISHDTFGTTYGRIHMQQDLSKLQTRKMKGLKKRPAERITEDHEKKS
KRIKKN

WO 2004/030615

PCT/US2003/028547

2278/6881
FIGURE 2094

ATGGAACAGTACATCTGTAAAAGGACAAGTGATGGCATCTACATCATAAATCTGAAGAGGACCTGGGAGAAAGCTT
 CTGCTGGCAGCTCATGCCATTGCTGCCATTGAAAACCCCTGCAGATGTCAGTGTTATATCCTCCAGGAATATTGGC
 CAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGCTGGCCGCTTCACTCCTGGAACCTTC
 ACTAACCAGATCCAGGCAGCTTTCTGGGAGCCACGGCTTCTTGTTGTTACTGACCCCAGGGCTGACCACCAGCCT
 CTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTATTCTCCTTGCTATGTGGACATTGCCATCGCA
 TGCAACAACAAGGGAGCTCACTCGGTGGGTTTGATGTGGTGGACACCGGCTCGGGAAGTTCTGCGCATGCGTGGC
 ACCATTTCTGCGAACACCCGTGGGAGGTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGAGATTGAAAAA
 GAAGAGCAGGCTGCTGCTAAAAAAGCTGTGACCAAGAAAGAATTCAGGGTGAATGGACTGCTTCAGCTCCTGAG
 TTCCTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGCATGCAGGCCACCGAATGGGTAAAAGCAATCACT
 GAATGGGTAGAAGCAACCGCTGAATGGTCTTAA

WO 2004/030615

PCT/US2003/028547

2279/6881
FIGURE 2095

MEQYICKRTSDGIYIINLKRTWEKLLLLAAHAIAAIENPADVSVISSRNIGQRAVLKFAAATGATPIAGRFTPGTF
TNQIQAAFWEPRLLVVTDPRADHQPLTEASYVNLPTIALFSLCYVDIAIACNNKGAHSVGLMWWTTPAREVLRMRG
TISCHEPWEVMPDLYFYRDPREEIEKEEQAAAKKAVTKKEFQGEWTASAPEFTATQPEVADWSEGMQATEWVKAIT
EWVEATAEWS

WO 2004/030615

PCT/US2003/028547

2280/6881
FIGURE 2096

ATGGCAAAGGAAGATAACAGAAGACCCTCCAGAGAGTGGAATCCTGAAAATCAAGGAACATTTCTGTATACTCAA
GTGAATGGGAAAGTGGAATATTTCTGAAGTGGAAGGGATTTACAGATGCTGACAATACTTGGGAACCTGAAGAA
AATTTAGATTGTCCAGAATTGATTGAAGCATTTCCTTAGCTCTCAGAAAGCTGGCAAACAAAAAGATGACAGCAGT
GGAGAATTGATGTTTCTCATGAAATGGAAAGATTGAGATGAGGCAGACTTGGTGCTGGCAAAGAAGCAAGTATG
AAGTGTCCTCAAATTGTAATTGCTTTTTATGAAGAGAGACTAACTTGGCATTCTTGTCCAGAAGATGAAGCTCAA
TAA

WO 2004/030615

PCT/US2003/028547

2281/6881
FIGURE 2097

MAKEDNRRPSREWNPENQGTFLYTQVNGKVEYFLKWKGFTDADNTWEPEENLDCPELIEAFLSSQKAGKQKDDSS
GELMFLMKWKDSDEADLVLAKEASMKCPQIVIAFYEEERLTWHSCPEDEAQ

WO 2004/030615

PCT/US2003/028547

2282/6881
FIGURE 2098

CTCTTCCGGTTCTAGGCACTTCGGGAGCCGCGGCTTATGGTGCAGACATGGCCAAGTCCAAGAACCACACCACAC
ACAACCAGTCCCGAAAAATGGCACAGAAATGGTATCAAGAAACCCCGATCACAAAGATACGAATCTCTTAAGGGGG
TGGACCCCAAGTTCCTGAGGAACATGCGCTTTGCCAAGAAGCACAAACAAAAAGGGCCTAAAGAAGATGCAGGCCA
ACAATGCCAAGGCCATGAGTGACGTGCCGAGGCTATCAAGGCCCTCGTAAAGCCCAAGGAGGTAAAGCCCAAGA
TCCCAAAGGGAGTCAGCTGCAAGCTCGATCGACATGCCTACGTTGCCCACCCCAAGCTTGGGAAGCGTGCTCTTG
CCCGTATTGCCAAGGGGCTCAGGCTGTGCCGGCCAAAGGCCAAGGCCAAGGCCAAGGATCAAA^bCAAGGCCCAGG
CTGCAGCTCCAGCTTCAGTTCCAGCTCAGGCTCCCAAAGGTACCCAGGCCCTACAAAGGCTTCAGAGTAGATAT
CTCTGCCAACATGAGGACAGAAGGACTGGTGCGACCCCCACCCCCACCCCTGGGCTATCATCTGCATGGGGCTG
GGGTCTCTGTGCTATTTGTACAAATAAACCTGAGGCAGG

WO 2004/030615

PCT/US2003/028547

2283/6881
FIGURE 2099

ACAAAAAGCTTTTACGAGGTATCAGCACTTTTCTTTCATTAGGGGGAAGGCGTGAGGAAAGTACCAAACAGCAG
CGGAGTTTTAAACTTTAAATAGACAGGTCTGAGTGCCTGAACTTGCCTTTTCATTTTACTTCATCCTCCAAGGAG
TTCAATCACTTGGCGTGACTTCACTACTTTTAAAGCAAAAGAGTGGTGCCAGGCAACATGGGTGACTGGAGCGCC
TTAGGCAAACTCCTTGACAAGGTTCAAGCCTACTCAACTGCTGGAGGGAAGGTGTGGCTGTCACTACTTTTCATT
TTCCGAATCCTGCTGCTGGGGACAGCGGTTGAGTCAGCCTGGGGAGATGAGCAGTCTGCCTTTTCGTTGTAACACT
CAGCAACCTGGTTGTGAAAATGTCTGCTATGACAAGTCTTTCCCAATCTCTCATGTGCGCTTCTGGGTCCTGCAG
ATCATATTTGTGTCTGTACCCACACTCTTGTACCTGGCTCATGTGTTCTATGTGATGCGAAAGGAAGAGAACTG
AACAAGAAAGAGGAAGAACTCAAGGTTGCCCAAATGATGGTGTCAATGTGGACATGCACTTGAAGCAGATTGAG
ATAAAGAAGTTCAAGTACGGTATTGAAGAGCATGGTAAGGTGAAAATGCGAGGGGGGTTGCTGCGAACCTACATC
ATCAGTATCCTCTTCAAGTCTATCTTTGAGGTGGCCTTCTTGTCTGATCCAGTGGTACATCTATGGATTTCAGCTTG
AGTGCTGTTTACACTTGCAAAAGAGATCCCTGCCACATCAGGTGGACTGTTTCCCTCTCTCGCCCCACGGAGAAA
ACCATCTTCATCATCTTCATGCTGGTGGTGTCTTGGTGTCCCTGGCCTTGAATATCATTGAACCTCTTCTATGTT
TTCTTCAAGGGCGTTAAGGATCGGGTTAAGGGAAAGAGCGACCCCTTACCATGCGACCAGTGGTGCCTGAGCCCT
GCCAAAGACTGTGGGTCTCAAAAATATGCTTATTTCAATGGCTGCTCCTCACCAACCGCTCCCTCTCGCCTATG
TCTCCTCTGGGTACAAGCTGGTTACTGGCGACAGAAACAATTCTTCTTGCCGCAATTACAACAAGCAAGCAAGT
GAGCAAACTGGGCTAATTACAGTGCAGAACAAAATCGAATGGGGCAGGCGGGAAGCACCATCTCTAACTCCCAT
GCACAGCCTTTTGATTTCCCGATGATAACCAGAATTCTAAAAAACTAGCTGCTGGACATGAATTACAGCCACTA
GCCATTGTGGACCAGCGACCTTCAAGCAGAGCCAGCTCGTGCCAGCAGCAGACCTCGGCCTGATGACCTGGAG
ATCTAGATACAGGCTTGAAAGCATCAAGATTCCACTCAATTGTGGAGAAGAAAAAGGTGCTGTAGAAAGTGCAC
CAGGTGTTAATTTTGATCCGGTGGAGGTGGTACTCAACAGCCTTATTCATGAGGCTTAGAAAACACAAAGACATT
AGAAATACCTAGGTTCACTGGGGGTGTATGGGGTAGATGGGTGGAGAGGGAGGGGATAAGAGAGGTGCATGTTGGT
ATTTAAAGTAGTGGATTCAAAGAACTTAGATTATAAAATAAGAGTTCATTAGGTGATACATAGATAAGGGCTTTT
TCTCCCCGCAAAACACCCCTAAGAATGGTTCTGTGTATGTGAATGAGCGGGTGGTAATTGTGGCTAAATATTTTGT
TTTTACCAAGAACTGAAATAATTCTGGCCAGGAATAAAATACTTCTGAACATCTTAGGTCTTTTCAACAAGAAA
AAGACAGAGGATTGTCCTTAAGTCCCTGCTAAACATTCCATTGTTAAATTTGCACTTTGAAGGTAAGCTTTCT
AGGCCTGACCCTCCAGGTGTCAATGGACTTGTGCTACTATATTTTTTTTATTCTTGGTATCAGTTTAAAATTCAGA
CAAGGCCCACAGAATAAGATTTTCCATGCATTTGCAAAATACGTATATTCTTTTCCATCCACTTGCACAATATCA
TTACCATCACTTTTTTCATCATTCCTCAGCTACTACTCACATTCAATTAATGGTTTCTGTAAACATTTTTAAGACA
GTTGGGATGTCACTTAACATTTTTTTTTTTTGGAGCTAAAGTCAGGGAATCAAGCCATGCTTAATATTTAACAATC
ACTTATATGTGTGTCGAAGAGTTTGTGTTTGTGTCATGTATTGGTACAAGCAGATACAGTATAAACTCACAAAC
ACAGATTTGAAAATAATGCACATATGGTGTCAAATTTGAACCTTTCTCATGGATTTTTGTGGTGTGGGCCAATA
TGGTGTTTACATTATATAATCCTGCTGTGGCAAGTAAAGCACACTTTTTTTTCTCCTAAAATGTTTTTCCCTG
TGATCCTATTATGGATACTGGTTTTGTTAATTATGATTCTTTATTTTCTCTCCTTTTTTTAGGATATAGCAGTA
ATGCTATTACTGAAATGAATTTCTTTTTCTGAAATGTAATCATTGATGCTTGAATGATAGAATTTTAGTACTGT
AAACAGGCTTTAGTCATTAATGTGAGAGACTTAGAAAAATGCTTAGAGTGGACTATTAAATGTGCCTAAATGAA
TTTTGCAGTAACCTGGTATTCTTGGGTTTTCTTACTTAATACACAGTAATTCAGAACTTGATTTCTATTATGAGTT
TAGCAGTCTTTTGGAGTGACCAGCAACTTTGATGTTTGCCTAAGATTTTATTTGGAATGCAAGAGAGGTTGAAA
GAGGATTCAGTAGTACACATACTAATTTATTTGAACTATATGTTGAAGACATCTACCAGTTTCTCCAAATGC
CTTTTTTAAACTCATCACAGAAGATTGGTGAAAATGCTGAGTATGACACTTTTCTTCTTGCATGCATGTCAGCT
ACATAAACAGTTTTGTACAATGAAAATTACTAATTTGTTTGACATTCCATGTTAAACTACGGTCATGTTTCAGCTT
CATTGCATGTAATGTAGACCTAGTCCATCAGATCATGTGTTCTGGAGAGTGTTCTTTATTCAATAAAGTTTTAAT
TTAGTATAAACAT

WO 2004/030615

PCT/US2003/028547

2284/6881

FIGURE 2100

MGDWSALGKLLDKVQAYSTAGGKVWLSVLFIFRILLGTAVESAWGDEQSAFRCNTQQPGCENVCYDKSFPI SHV
RFWVLQIIFVSVPTLLYLAHVFYVMRKEEKLNKKEEELKVAQTDGVNVDMHLKQIEIKKFYGIIEHGKVKMRGG
LLRTYIISILFKSIFEVAFLLIQWYIYGFSLSAVYTCKRDPCPHQVDCFLSRPTEKTIFIIFMLVVSLSLALNI
IELFYVFFKGVKDRVKGKSDPYHATSGALSPAKDCGSQKYAYFNGCSSPTAPLSPMSPPGYKLVTGDRNNSSCRN
YNKQASEQNWANYSAEQNRMGQAGSTISNSHAQPFDFPDDNQNSKKLAAGHELQPLAIVDQRPSSRASSRASSRP
RPDDLEI

WO 2004/030615

PCT/US2003/028547

2285/6881
FIGURE 2101

GCTGTGCGTCCGGAAGTGTCTCGCAGATAGTAAATAATCTCGGAAAGGCGAGAAAGAAGCTGTCTCCATCTTGTC
TGTATCCGCTGCTCTTTGTGACGTTGTGGAGATCGGGGAGCGTCCTGGGGCTGTGCTCCATGGCGAGCTGGATACCA
TGTTTGTGTGGAAGTGCCCGTGTTTGTATGCCGATGCTGTCCTAGTGGAAACAACCTCCACTGTAACCTAGATTG
ATCTATGCACTTTTTCTTGCTTGTGGAGTATGTGTAGCTTGTGTAATGTTGATACCAGGAATGGAAGAACAACCTG
AATAAGATTCTCGGATTTTGTGAGAATGAGAAAGGTGTTGTCCCTTGTAACATTTTGGTTGGCTATAAAGCTGTA
TATCGTTTTGTGCTTTGGTTTGGCTATGTTCTATCTTCTCTCTTTACTAATGATCAAAGTGAAGAGTAGCAGT
GATCCTAGAGCTGCAGTGCACAATGGATTTTGGTTCTTTAAATTTGCTGCAGCAATTGCAATTATTATTGGGGCA
TTCTTCATTCCAGAAGGAACCTTTTACAACCTGTGTGGTTTTATGTAGGCATGGCAGGTGCCTTTTGTTCATCCTC
ATACAACCTAGTCTTACTTATTGATTTTGCACATTCATGGAATGAATCGTGGGTTGAAAAATGGAAGAAGGGAAC
TCGAGATGTTGGTATGCAGCCTTGTTATCAGCTACAGCTCTGAATTATCTGCTGTCTTTAGTTGCTATCGTCTCTG
TTCTTTGTCTACTACACTCATCCAGCCAGTTGTTTCAAGAAACAAGGCGTTCATCAGTGTCAACATGCTCCTCTGC
GTTGGTGCTTCTGTAATGTCTATACTGCCAAAAATCCAAGAATCACAACCAAGATCTGGTTTGTACAGCTCTTCA
GTAATTACAGTCTACACAATGTATTTGACATGGTCAGCTATGACCAATGAACCAGAAACAAATTGCAACCCAAAGT
CTACTAAGCATAATTGGCTACAATACAACAAGCACTGTCCCAAAGGAAGGGCAGTCAGTCCAGTGGTGGCATGCT
CAAGGAATTATAGGACTAATTCTCTTTTTGTTGTGTGTATTTTATTCCAGCATCCGTACTTCAAACAATAGTCAG
GTTAATAAACTGACTCTAACAAGTGATGAATCTACATTAATAGAAGATGGTGGAGCTAGAAGTGATGGATCACTG
GAGGATGGGGACGATGTTTACCGAGCTGTAGATAATGAAAGGGATGGTGTCACTTACAGTTATTCTCTTTTAC
TTCATGCTTTTCTGGCTTCACTTTATATCATGATGACCCCTTACCAACTGGTACAGGTATGAACCTCTCGTGAG
ATGAAAAGTCAGTGGACAGCTGTCTGGGTGAAAATCTCTTCCAGTTGGATTGGCATCGTGCTGTATGTTTGGACA
CTCGTGGCACCACCTTGTCTTACAAATCGTGATTTTGACTGAGTGTAGACTTCTAGCATGAAAGTCCCACTTTGAT
TATTGCTTATTTGAAAACAGTATTCCCACTTTTGTAAAGTTGTGTATGTTTTTGTCTCCCATGTAACCTCTCCA
GTGTTCTGGCATGAATTAGATTTTACTGCTTGTCTATTTTGTATTTTCTTACCAAGTGCATTGATATGTGAAGTA
GAATGAATTGCAGAGGAAAGTTTTATGAATATGGTGATGAGTTAGTAAAGTGGCCATTATTGGGCTTATTCTCT
GCTCTATAGTTGTGAAATGAAGAGTAAAAACAAATTTGTTTGAATTTTTAAATTTATATTAGACCTTAAGCTGT
TTTAGCAAGCATTAAAGCAAATGTATGGCTGCCTTTTGAATATTTGATGTGTTGCCTGGCAGGATACTGCAAG
AACATGGTTTTATTTTAAATTTTATAAACAAGTCACCTTAAATGCCAGTTGTCTGAAAAATCTTATAAGGTTTTACC
CTTGATACGGAATTTACACAGGTAGGGAGTGTGTTAGTGGACAATAGTGTAGGTTATGGATGGAGGTGTCCGTA
AAATTGAATAACGAGTAAATAATCTTACTTGGGTAGAGATGGCCTTTGCCAACAAAGTGAAGTGTGTTGGTTGTT
TTAAACTCATGAAGTATGGGTTCACTGGAAATGTTTGAAGTCTGAAGGATTTAGACAAGGTTTTGAAAAGGATA
ATCATGGGTTAGAAGGAAGTGTGTTGAAAGTCACCTTTGAAAGTTAGTTTTGGGCCAGCACGGTAGCTCACCCTTGT
AATCCCAGCACTTTGGGAGGCTGAGGTGGGTAGATTACTTGAGCCCAGGAATTCAAGACCAGCCTGGGCAACATG
GTGAAACCCTGTTTCTATAAAAAATAATCTGGGCTTTGTAGCATATGCCTGTGGTCCCAGCTACTGAGGAGGCTG
AGGTGGGAGGATTGCTTGAGCCCAGGAGGCAGAGGTTGCAGTGAGCCAAGGTCACGTCACTGCACTCTAGCCTGG
GCAACAGAGTAAGACAAAAAATATATATATATTGAAAATCAAAGGAGGCAAAATTTTGCAGGGGAAGGAAGTAA
CTGCAAAACACTAGGCTTTAGTAGGTACTTATATAAAATCTAGTCCAGTTCTCTCATTTAAAAAATGAAGACAC
TGAAATACAGACTTAAATAGCTCAGATAGCTAATTAGGAAATTTCAAGTTGGCCAATAATAGCATTCTCTCTGAC
ATTTAAAAATAATTTCTATTCAAATACATGCATAATTGATTTTACACCTCATTACTGGTGGATAATTTATGTGA
TGTGGATTGCTGGTGTCCAGCATGACCCATAAACAGGTGAGAAGAATGATGGAATGTTTTAGAATAAACTCCTGC
TTATAGTATACTACACAGTTCAAAGATGTTTAAATGCTTTTGTATTTTACTGCCATGTAATTGAAATATATAGA
TTATTGTAACCTTTCAACCTGAAAATCAAGCAGTATGAGAGTTTGTATTTTGTATGTGTCACTAGTGTCTAATG
AAGCTTTTAAATCTACAATTTCTCTTTAAAAATATTTATTAATGTGAATGGAATATAACAATTCAGCTTAATT
CCCCAACCTTATTCTGTGTGTAGACATTGTATTCCACAATTTGAATGGCTGTGTTTTACCTCTAAATAAATGAA
TTCAGAG

WO 2004/030615

PCT/US2003/028547

2286/6881

FIGURE 2102

MGSVLGLCSMASWIPCLCGSAPCLLCRCCPSGNNSTVTRLIYALFLLVGVCVACVMLIPGMEEQLNKIPGFCENE
KGVVPCNILVGYKAVYRLCFGLAMFYLLLSLLMIKVKSSSDPRAAVHNGFWFFKFAAAIAIIIIGAFFIPEGTFTT
VWFYVGMAGAFCFILIQVLVLLIDFAHSWNEVSWVEKMEEGNSRCWYAALLSATALNYLLSLVAIVLFFVYYTHPAS
CSENKAFISVNMLLCVGASVMSILPKIQESQPRSGLLQSSVITVYTMYLTSAMTNEPETNCNPSLLSIIGYNTT
STVPKEGQSVQWWHAQGIIGLILFLLCVFYSSIRTSNNSQVNKLTLTSDESTLIEDGGARSDGSLEDGDDVHRAV
DNERDGVITYSYFFHFMLFLASLYIMMILTNNWYRYEPSREMKSQWTAVVVKISSWIGIVLYVWTLVAPLVLTNR
DFD

WO 2004/030615

PCT/US2003/028547

2287/6881
FIGURE 2103

GGGGACCTCTCCTGACGCTGCGCTCTCTGCGAGGCAACCTTTACGTCCATCGCTTGTCATCTTAGGATCCCCA
TGTTATTTTAGCCCAGATTGGCTAGTTCTGGGGAGGCAGCATGGTGGGACGATTCTGTCCCGAGTCCCCGCCAGG
CTTTGTTTCGGGTGCGCCGCTACCAGCGCGGTCTCCCTAGATCCTCCATCCGGGGAACCTCGCCCCGGGTGCGGGTA
CCCCGGGCGCGCAGCGCTGCCTCGAGGGTGTATGGATGCACCGCGCGCGGCGAGAGAGACCGGGGGCTGGGCCTG
GGAGACCTTAGCGGGGGCGGGGGCGAAGAAGAGATTTATTCCAGTGAAACAACAAGTGAAGTCAAGTAAGTCC
TCCCAGAGTACTTCCAAGTCTGGGTGGCCCCAAATCCAATAATGCCACCACCAAGGCGGCTGGTGGTGCCCTG
CAGTCAACAGCCAGTCTCTTCGTGGTCTCACTCTCTCTCTGTCATCTCTACTCTTAAGAGACTCAGGCCAAGAAA
CGTCTTCTAAATTTCCCCATCTTCTAAACCCAATCCAATGGCGTCTGGAAGTCCAATGTGGCAAGGAAAAACAG
GTCTTCATCGAATCTACTAATTCACACCTTTTATTGACACAGAAAAATGTTGAGAATCCCAAATTTGATTGATTT
GAAGAACATGTGAGAGGTTTGACTAGATGATGGATGCCAATATTAATCTGCTGGAGTTTCATGTACAAGATGAA
GGAGAGGCAACATCCAAAATAGTTAAGACATGATTTCTTGAATGTGGCTTGAGAAATATGGACACTTAATACTA
CCTTGAAAAATAAGAATAGAAATAAAGGATGGGATTGTGGAATGGAGATTGAGTTTTTCAATTTGGTTTCAATTTCT
ATAAGGCCATAAAACAGGTAATATAAAAAGCTTCCATGATTCTATTTATATGTACATGAGAAGGAAGTTCAGGT
GTTACTGTAATTCCTCAACGTATTGTTTCGACAGCACTAATTTAATGCCGATATACTCTAGATGAAGTTTTACAT
TGTTGAGCTATTGCTGTTCTCTTGGGAAGTGAAGTCACTTTCTCTGAGGCTTTGGATTGACATTGCATTTGA
CCTTTTATGTAGTAATTGACATGTGCCAGGGCAATGATGAATGAGAATCTACCCCGAGATCCAAGCATCTGAGC
AACTCTTGATTATCCATATTGAGTCAATGGTAGGCATTTCCTATCACCTGTTTCCATTCAACAAGAGCACTACA
TTCATTTAGCTAAACGGATTCCAAAGAGTAGAATTGCATTGACCACGACTAATTTCAAAATGCTTTTTATTATTA
TTATTTTTTAGACAGTCTCACTTTGTGCGCCAGGCGGAGTGCAGTGGTGCGATCTCAGATCAGTGTACCATTG
CCTCCCGGGCTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCACCTGCCACCATGCCCG
GCTAATTTTTGTAATTTTAGTAGAGACAGGGTTTCACCATGTTGCCAGGCTGGTTTGAAGTCTGACCTCAGG
TGATCCACCCGCTCGGCCTCCCAAAGTGCTGGGATTACAGGCTTGAGCCCCGCGCCAGCCATCAAAATGCTT
TTTATTTCTGCATATGTTGAATACTTTTACAATTTAAAAAATGATCTGTTTTGAAGGCAAAATTGCAAATCTT
GAAATTAAGAAGGCAAAATGTAAAGGAGTCAAACTATAAATCAAGTATTTGGGAAGTGAAGACTGGAAGCTAA
TTTGCAATTAATTCACAACTTTTATACTCTTCTGTATATACATTTTTTTCTTTAAAAAACAAGTATGGATCA
GAATAGCCACATTTAGAACACTTTTTGTTATCAGTCAATATTTTAGATAGTTAGAACCTGGTCCTAAGCCTAAA
AGTGGGCTTGATTCTGCAGTAAATCTTTTACAACGCTCGACACACATAAACCTTTTTAAAAATAGACACTCCC
CGAAGTCTTTTGTTCGATGGTCACACACTGATGCTTAGATGTTCCAGTAATCTAATATGGCCACAGTAGTCTTG
ATGACCAAAGTCCTTTTTTCCATCTTTAGAAAAGTACATGGGAACAAACAGATCGAACAGTTTTGAAGCTACTG
TGTGTGTGAATGAACACTCTTGCTTTATTCCAGAATGCTGTACATCTATTTGGATTGTATATTGTGTTTGTGTA
TTTACGCTTTGATTATAGTAACTTCTTATGGAATTGATTGTCATTGAACACAACTGTAAATAAAAAGAAA

WO 2004/030615

PCT/US2003/028547

2288/6881
FIGURE 2104

CAGAAGCGGCTAGTGGCGGCTGCCTGCGTCCCCAACCCCTCCGCGCAGCGCTCGCGACACGCGTGCCAGGAGTG
GGAGCGAGCGGGCGGGGCCAGCTGCGTTCTGAGCCTGGGCGCAGCTGCCATCTGCTCTGGGAAGCACCAGGGTGTC
CCCGCCGCCCTCAGCTCGAAGTCAGCCACCATGGAGGCGCAGGCACAAGGTTTGTGGAGACTGAACCGTTGCAA
GGAACAGACGAAGATGCAGTAGCCAGTGCTGACTTCTCTAGCATGCTCTCTGAGGAGGAAAAGGAAGAGTTAAAA
GCAGAGTTAGTTCAGCTAGAAGACGAAATTACAACACTACGACAAGTTTTGTCAGCGAAAAGAAAGGCATCTAGTT
GAGATAAAACAAAAACTCGGCATGAACCTGATGAATGAATTAACAGAACTTCAGCAAAAGCTGGCATGACATG
CAGACTACCACTGCCTACAAGAAAACACATGAAACCTGAGTCACGCAGGGCAAAAGGCAACTGCAGCTTTCAGC
AACGTTGGAACGGCCATCAGCAAGAAGTTCGGAGACATGAGTTACTCCATTGCGCCATTCCATAAGTATGCCTGCT
ATGAGGAATTCTCTACTTTCAAATCATTTGAGGAGAGGGTTGAGACAACCTGTCACAAGCCTCAAGACGAAAGTA
GGCGGTACGAACCCTAATGGAGGCAGTTTTGAGGAGGTCTCAGCTCCACGGCCCATGCCAGTGCCCAGAGCTTG
GCAGGAGGCTCCCGGCGGACCAAGGAGGAGGAGCTGCAGTGCTTAAGTCCAGCCAGCGTGTCAGCTGCATCCAGAAA
CCGGCCACTACCCAGCCCATCTCTGCCTGTGCTTATCCAGATAAGAAGACCAAAATCCCGCTGGGAAAAACCCAG
GCCTTGACATTGTTATTCAAATGGCCCCCTCCAGAAAGTTAATGATTTCCATTGTATTGTGTTGATGATGGAC
CACTTGACCATCACATTTAGTATTCATAGATGACTGTCACATTTTAAAATGTTCCCACTTGAGCAGGTACACAA
CTGGTCATAATTCCTGTCTGTGTAATTCGATGTATATTTTTCCAAACATGTAGCTATTGTTTGCTTTGATTTTG
CTTGGCCTCCTTTATGATGTGCATGTCCTTGAAGGCTGAATGAACAGTCCCTTTCAGTTCAGCAGATCAACAGGA
TGGAGCTCTTCATGACTGTCTCCAGCAATAGGATGATTTACTATAAATTTTCATCCAACACTACTTGTGATCTCTCTC
ACCTACATCAATTATGTATGTTAATTTAGCAATTAAGAATTGATTTT

WO 2004/030615

PCT/US2003/028547

2289/6881
FIGURE 2105

MEAQAQGLLETEPLQGTDEDAVASADFSSMLSEEEKEELKAELVQLEDEITTLLRQVLSAKERHLVEIKQKLG MNL
MNELKQNF SKSWHDMQTTTAYKKTHETLSHAGQKATAAFSNVGTAI SKKFGDMSYSIRHSISMPAMRNSPTFKSF
EERVETTIVTSLKTKVGGTNPNGGSFEEVLSSTAHA SAQSLAGGSRRTKEEELQC

WO 2004/030615

PCT/US2003/028547

2290/6881
FIGURE 2106

GGAGTTGGAAGGGGAGGAGGAAGAGGGGGAGCAGGAAGAGGGGCAGAAGGAAGAAGAAGAGGGGGAGGAGAAAGA
GATAGAAGAGTAAGAGGAGGGGGAAAGAAAGACAAGGGGAAGGGGAGGAGGAGGAGGACGGGGAGGAGCTTCGCCG
CGGCCTGCTCCGCCAGCCGGGTCGGTGGCCGCATGGCTTCGGTCTCCTCTGCGACCTTCTCGGGCCACGGGGC
TCGGTCCCTACTGCAGTTCCCTGCGGCTGGTAGGGCAGCTCAAGAGAGTCCCACGAACTGGCTGGGTATACAGAAA
TGTCCAGAGGCCGAGAGCGTTTCAGATCACATGTACCGGATGGCAGTTATGGCTATGGTGATCAAAGATGACCG
TCTTAACAAAGACCGATGTGTACGCCTAGCCCTGGTTCATGATATGGCAGAATGCATCGTTGGGGACATAGCACC
AGCAGATAACATCCCCAAAGAAGAAAAACATAGGCGAGAAGAGGAAGCTATGAAGCAGATAACCCAGCTCCTACC
AGAGGACCTCAGAAAGGAGCTCTATGAACCTTTGGGAAGAGTACGAGACCCAATCTAGTGCAGAAGCCAAATTTGT
GAAGCAGCTAGACCAATGTGAAATGATTCTTCAAGCATCTGAATATGAAGACCTTGAACACAAACCTGGGAGACT
GCAAGACTTCTATGATTCCACAGCAGGAAAATTCAATCACCCCTGAGATAGTCCAGCTTGTTTCTGAACCTTGAGGC
AGAAAGAAGCACTAACATAGCTGCAGCTGCCAGTGAGCCACACTCCTGAGACACTCTCTAAATTGCTGCACTCCT
GTAACAAACATTATTTTTCCATTTTCATTGTATTGTGTTTTGCCATTGTTGGTCTGTTGATTTCCTAGATGTGAG
TCTGTTTGTTTTCAATTGTCTGAACCTCAGCAAGAAATGTGATACAACTTGGGCACTAAAAGAAGCCACAGAACA
GGAAGCGGTCATGAAAGTGCCATGGATGAACACTGGAGGTGGCAGTGCCTGTTTATGAACATAAATAAATAATAT
TAAACACCTAAAATATTAGAATATTTATTGGAGATTTAAATCATCTTATTCTGACTTAATTACCGATATCCCCG
AAGGCTAGGTTTCATTGAATAATAGAAAATTTTCATTATGATTGCTTTTAAGAACAGATTCTTCAGCTGATTTAGTG
ATAAGAATCCAGAAAAGAAAATGTACTAGTGATGTATTCTCTCCCCAGATGAAATTGCTGCCTTATTCAGATTTA
CTCTCTTGAGCCAGATTTTGAATTTCACTGCAGACTGCTTCAGACTTCTAATCATAGGCTTGTAACCTACTAAT
AGGCTCTGCCCCCTCTTCCCAATACTTTTTGTCAATTTAGAGATATAAACCGGGGCATATAAAAAATGCAACTTGAT
TCCTTTGTATATTTTTCCCTGTCTGACTTATAAATCTTGAGACCTTTATTGTAAAAGCATGTATCATCAGGTGAG
AAATATAAATAGGAAGTGGGGTCATTGAGCCTCAGGTAGGGAATATATCAACCCGATTCTTCCTCTCTTTTCCC
TTTTATAGGATAAATAATCC

WO 2004/030615

PCT/US2003/028547

2291/6881
FIGURE 2107

GACGGCAGCCGCCCGGCCGACAGCCCCGAGACGACAGCCCGGCGCGTCCCGGTCCCCACCTCCGACCACCGCCA
GCGCTCCAGGCCCGCCGCTCCCCGCTCGCCGCCACCGCGCCCTCCGCTCCGCCCGCAGTGCCAACCATGACCGC
CGCCAGTATGGGCCCCGTCCGCGTCGCCTTCGTGGTCTCTCGCCCTCTGCAGCCGGCCGGCCGTGCGGCCAGAA
CTGCAGCGGGCCGTGCCGGTGCCCGGACGAGCCGGCGCCGCGCTGCCCGGCGGGCGTGAGCCTCGTGCTGGACGG
CTGCGGCTGCTGCCGCGTCTGCGCCAAGCAGCTGGGCGAGCTGTGCACCGAGCGCGACCCATGCGACCCGCACAA
GGGCCTATTCTGTCACTTCGGCTCCCCGGCCAACCGCAAGATCGGCGTGTGCACCGCCAAAGATGGTGCTCCCTG
CATCTTCGGTGGTACGGTGTACCGCAGCGGAGAGTCTTCAGAGCAGCTGCAAGTACCAGTGACAGTGCCTGGA
CGGGGCGGTGGGCTGCATGCCCTGTGCAGCATGGACGTTCTGTGCCAGCCCTGACTGCCCTTTCCCGAGGAG
GGTCAAGCTGCCCGGGAAATGCTGCGAGGAGTGGGTGTGTGACGAGCCCAAGGACCAAAACCGTGGTTGGGCTGC
CCTCGCGGCTTACCGACTGGAAGACAGTTTGGCCAGACCCAACTATGATTAGAGCCAACTGCCTGGTCCAGAC
CACAGAGTGGAGCGCCTGTTCCAAGACCTGTGGGATGGGCATCTCCACCCGGGTTACCAATGACAACGCCTCCTG
CAGGCTAGAGAAGCAGAGCCGCTGTGCATGGTCAGGCCTTGCGAAGCTGACCTGGAAGAGAACATTAAGAAGGG
CAAAAAGTGATCCGTACTCCCAAAATCTCCAAGCCTATCAAGTTTGTAGCTTTCTGGCTGCACCAGCATGAAGAC
ATACCGAGCTAAATTCTGTGGAGTATGTACCGACGGCCGATGCTGCACCCCCACAGAACCACCACCCTGCCGGT
GGAGTTCAAGTGCCCTGACGGCGAGGTCATGAAGAAGAACATGATGTTTCATCAAGACCTGTGCCTGCCATTACAA
CTGTCCCGGAGACAATGACATCTTTGAATCGCTGTACTACAGGAAGATGTACGGAGACATGGCATGAAGCCAGAG
AGTGAGAGACATTAATCATTAGACTGGAACCTGAACTGATTACATCTCATTTTTCCGTAAAAATGATTTTCACT
AGCACAAGTTATTTAAATCTGTTTTTCTAACTGGGGGAAAAGATTCCCACCCAATTCAAAACATTGTGCCATGTC
AAACAAATAGTCTATCAACCCCGACACTGGTTTGAAGAATGTTAAGACTTGACAGTGGAACCTACATTAGTACAC
AGCACCAGAATGTATATTAAGGTGTGGCTTTAGGAGCAGTGGGAGGGTACCAGCAGAAAGGTTAGTATCATCAGA
TAGCATCTTATACGAGTAATATGCCTGCTATTTGAAGTGTAATTGAGAAGGAAAATTTTAGCGTGCTCACTGACC
TGCTGTAGCCCCAGTGACAGCTAGGATGTGCATTCTCCAGCCATCAAGAGACTGAGTCAAGTTGTTTCTTAAGT
CAGAACAGCAGACTCAGCTCTGACATTCTGATTGCAATGACACTGTTTCAAGGAATCGGAATCCTGTGATTAGACT
GGACAGCTTGTGGCAAGTGAATTTGCCTGTAACAAGCCAGATTTTTTAAAATTTATATTGTAAATATTGTGTGTG
TGTGTGTGTGTATATATATATATATGTACAGTTATCTAAGTTAATTTAAAGTTGTTTGTGCCTTTTTATTTTT
GTTTTTAATGCTTTGATATTTCAATGTTAGCCTCAATTTCTGAACACCATAGGTAGAATGTAAAGCTTGTCTGAT
CGTTCAAAGCATGAAATGGATACTTATATGGAAATCTGCTCAGATAGAATGACAGTCCGTCAAACAGATTGTT
TGCAAAGGGGAGGCATCAGTGTCTTGGCAGGCTGATTTCTAGGTAGGAAATGTGGTAGCCTCACTTTTAATGAA
CAAAATGGCCTTTATTAAAACTGAGTGACTCTATATAGCTGATCAGTTTTTTTACCTGGAAGCATTGTTTCTAC
TTTGATATGACTGTTTTTTCGGACAGTTTTATTTGTTGAGAGTGTGACCAAAAGTTACATGTTTGCACCTTTCTAGT
TGAAAAATAAGTGTATATTTTTTCTATAAA

WO 2004/030615

PCT/US2003/028547

2292/6881
FIGURE 2108

CACTGCTGACATAACTCCCTTGGTCTTCAATTTAATAGTTGTTAAGTTTTTGCCACATTGCATATGCCTTTCAT
 TTATAATTTATTTACCCTGCTTGACTTAGTTTTGGGAATTCGTAAATTTAAAGGTGTGTGATTCTGTTTGCATC
 TCCCTGTCACGTGACACACCTAGATGTGTGTTACTTCAATTTAAATTTCTCAAATTTAATTTTGATTGCTTCAG
 CAGGGAAAATATTCTCAATAATGTAAATAATTAAGGTCTATACATGGGTTGTATTTTCTGGTTCACAACAGCA
 CAAAGTGTCTTTCAATTTTTTGTGGTTTTCTTTTAAGATCTTTTTTACCCTGAAGTCGGTGAATACTTTTCTAG
 TTTATTTGATACTCTTTCTGTGTATATATTAAGCTTTTGTGTAGATTGCCTAGTAAAATTACTAAGGATAGGTT
 GTTTTACATATGGTCTATTTAAGTCTGATGTTTACGGGGGAAAGTGTAGTTACTAAAAATGTTTAAACATAATTT
 GGAAGAAGAGTATGAACAACCAATACCAATACCTATTGCGTTTGGATTCTTAAGACCCAGTTTGTATTCCACT
 AAAGTAGTTATCTTAACCATATCATCTGGTTTTGTGGGCCATTATTTACCTTCCCTTATGTCTTATAGAATAATG
 GTTAATATTTTAGGTCAAAATTAATTTTGGAAAGTAACTTTCCACAATTAAGTGTTTTGGAGCCTGACAAA
 ATTTAGTGTTTACCTTGGCGTGCCATTTTGTGTGTCATCTTCATTAAAAAGCAATTGGAGGTTTGGCAGTTATCTC
 ACTTCCCTTTTAAATCAATGTTGTTTAAATGCACATACTGAATTTCTGTAAAGAGGATTATCTTAGTTTATACT
 TTGTATTTTATAATGTTCTTGTATAGCAGCTCGGTACTGAAGGCGGTGTTTAACTTGGCAAGCTCTGAGACTTCA
 AATGGGAACAAAATAGTAAGTAGCTAAGTAAACCACATCTTTGCAACCAAAATAAAGATGAGTTAAAGGTATCTG
 GTTAGGCTATTTTATGAGGACTATGCTCTGGTGGGACCACAGGTACCTGATACTTAGTGCTGTGCTGCCTGAA
 ACCTCAGCATGGAGACATCACCACATGCACTGTGGCCATTGAGCATCTTTCTGGAGCACCAGTTCACTCCAGGTT
 TTTATTTTAGGGTGTCATCGATTTTACCTACTTTGTGAGTGGTAGAAGTTGCTTTGCATATCAGAAAACTCC
 ATTTTTTCCACAAAAGGGATTACAGAAAATCTTTTGTGAGTGAGTGATTGGAAGTTAGAGACTCCTGTTGCCA
 GAATCAGACTGCCCTAGAACAGAAATGGACAATGCAGGGAGGAGAATTACACAAACAGCACCTGTTCTGAGGCT
 GTGCCAGCCCACCAGGCTGCTCAAATGTGGTCTTTACTTCAAGTGCACAGAGGCACATGAGGTTTCTGGTGATA
 AACCAGCGTCTTACCGCTGTTTTAAAGTCCCATCCCATGGCTTTCACAATCAGTTCCGTTTTTTTTTGCTGTACT
 TGATAAAATGTTTATTCTCATAACAGGTCAAGTACATTTACTTCTATTACAGTGAGTACCAATAACAACAAAAG
 CGCTTACAAATTTGGGGGGCGTGATTTTAGTACCTTTATTTGAAGTGTAATCATTTTAAATTATTATTATTTAA
 CTGGGGCAGTTATCAGTGGTTTAAACAGGAATTTAGTGGCTTCAATTTGTTTAAAGAAACATATTAAGTTTGAGG
 GAAAAATTTCCCATGAAATATTTGGAACGTAAGAGTAGTATTGATTAGAGAAAATTAAATAAGAAACATAGTATG
 GTAGCCAAATTTTTTAAAAATCTTGAATTTTCTGTAGGTGAGTTTGAAGTCTGTGAAAAGTGAAGGTTGC
 CCTGTGGAGATTAAATTTAGAGTTGTTTTCATAACTGACAGCATGGTGAATCCATTTGAGTCAAAGTGAAGAATT
 TCCTCATCAAGTGACTATACATTTGTTTTGTGTGCTCAAAGAAATACTCAAACACAGACTGATATTAACCAGC
 CAGGTAAATTGAACGACAATGTGGCATTAGGTATTTGGCTGTTTATTGGTCGTTAAATACTATGGTTTTGCAATA
 TGATTGATGGTAAAAGAGTGATGTATTTGATACTAGAGTAGCTTGTTTTTTTAGTAGGTGTGGGACCATCTCT
 TTTACAAGTGCAACTCAGTCTAGGACAGCCATGGATGCAGTGTCTGGAGTTGGACCCTCTGAGCCCCGCTGGCTGC
 CCCAGTAGCATCTGCATTGGTGACCAAGGACACTGCATTTGAAGAGGTCGCCACTGGGTTATTTAGTGTCTTCA
 CTGCTTTTGTAAAAAATTGTAATAATTTGTACACAAAAAGTTGTGTTTTTGAATATCAATTGTTTAGACACACCT
 ACAATGATAAATAAGTGCCTTTAAAGGCCCTCTTTCCATGAAATACATCTGTGGTTTAGCAAGGAAAGTACAAA
 ATAGTTTATGTAGTTGGTATAAATTTTTATTTGTGTCTTCATGTAGAAAAATGAATGTCATAATAAATAATAAAA
 CTTACGTAAAG

WO 2004/030615

PCT/US2003/028547

2293/6881
FIGURE 2109

MDNAGRRIHTNSTCSEACASPPGLLKCGLYFKCTEAHEVSGDKPASRYRCFKVPSWLSQSVPFLLYLIKCLFSY
RSSTFTSIHSEYPITTKALTNLGGVILVPLFEV

WO 2004/030615

PCT/US2003/028547

2294/6881
FIGURE 2110

GTGACTGCTTAGAAAACTGCACAGCATCTGATGAAATTAGCGAATAAGAACATCAACCATGTCTTACACTCCAGG
AGTTGGTGGTGACCCCGCCAGTTGGCCAGAGGATCTCTTCTAACATCCAGAAGATCACACAGTGTTCTGTGGA
AATACAAAGAACTCTGAATCAACTTGGAACACCTCAAGATTACCTGAATTGAGGCAACAGTTGCAACAGAAGCA
GCAGTATACTAACCAGCTTGCCAAAGAAACAGATAAGTACATTAAAGAGTTTGGATCTCTGCCCACCACCCCCAG
TGAACAGCGTCAAAGGAAAATACAGAAGGATCGCTTAGTGGCAGAGTTTACAACATCACTGACAACTTCCAGAA
GGTCCAGAGGCAGGCTGCTGAGCGAGAGAAAGAGTTTGTGTCTCGAGTAAGAGCCAGTTCCAGAGTGTCTGGCAG
TTTTCTGAGGACAGCTCAAAAGAAAGGAATCTTGTATCCTGGGAAAGCCAACTCAACCTCAAGTGCAGGTGCA
GGATGAAGAAATTACAGAGGATGACCTCCGTCTTATTCATGAGAGAGAATCTTCTATCAGGCAACTTGAAGCTGA
TATTATGGATATTAATGAAATATTTAAAGATTGGGAATGATGATTTCATGAACAAGGAGATGTAATAGATAGCAT
AGAAGCCAATGTGGAAAATGCAGAGGTGCACGTTTCAAGCAAGCAATCAGCAGCTGTCAAGGGCAGCAGATTATCA
GCGCAAATCCAGAAAAACCTGTGCATCATCATTCTTATCCTTGTTCATTGGAGTTGCGATTATCAGTCTCATCAT
ATGGGGATTGAACCACTGAAGTTATAAAGGAGCACACTGTCGCACTACATTGTCTAAATTATGTAGGAAGATTCC
TGTAATCATGTTTTTTTAAATTATTATTTTAAAGCTATTGTATAAAGGATGGTTCCCATACTTTGTTATTTTTATT
GGGGGGGTTGGGGTGGTTTCCTTTGGATTAAATCTGATATTTTCTAATACTGAAAGATTTTCTAAATGTCACTGCT
GACATAACTCCCTTGGTCTTCAATTTAATAGTTGTTAAGTTTTTGGCCACATTGCATATGCCTTTCATTTATAAT
TTATTTACCTTGCTTGACTTAGTTTTGGGAATTCGTAAATTTAAAGGTGTGTGTATTCTGTTTGCATCTCCCTGT
CACTGTGACACACCTAGATGTGTGTTACTTCAATTTAAATTTCTCAAATTTAATTTTGATTGCTTCAGCAGGGAA
AATATTCTCAATAATGTAAAATAATTAAGGTCTATACATGGGTGTATTTTTCTGGTTCACAACAGCACAAAGTG
TCTTTCATTTTTTTGTTGGTTTTCTTTTAAAGATCTTTTTTACCCTGAAGTCGGTGAATACTTTTCTAGTTTATTT
GATACTCTTTCTGTGTATATATTAAGCTTTTGCTGTAGATTGCCTAGTAAAATTACTAAGGATAGGTTGTTTTTA
CATATGGTCTATTTAAGTCTGATGTTTACGGGGGAAAGTGTAGTTACTAAAAATGTTTAACATAATTTGGAAGAA
GAGTATGAACA

WO 2004/030615

PCT/US2003/028547

2295/6881

FIGURE 2111

CTTTCCCTGCCGCCGCCGAGTCGCGCGGAGGCGGAGGCTTGGGTGCGTTCAAGATTCAGCTTCACCCGTAACCCA
CCGCCATGGCCCGAGGAAGGCATTGCTGCTGGAGGTGTAATGGACGTTAATACTGCTTTACAAGAGGTTCTGAAGA
CTGCCCTCATCCACGATGGCCTAGCACGTGGAATTGCGGAAGCTGCCAAAGCCTTAGACAAGCGCCAAGCCCATC
TTTGTTGCTTGTCATCCAACCTGTGATGAGCCTATGTATGTCAAGTTGGTGGAGGCCCTTTGTGCTGAACACCAAA
TCAACCTAATTAAGGTTGATGACAACAAGAACTAGGAGAATGGGTAGGCCTTTGTAAAATTGACAGAGAGGGGA
AACCCCGTAAAGTGGTTGGTTGCAGTTGTGTAGTAGTTAAGGACTATGGCAAGGAGTCTCAGGCCAAGGATGTCA
TTGAAGAGTATTTCAAATGCAAGAAATTGAAAGAAATAAATCTTTGGCTCACAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2296/6881
FIGURE 2112

MAEEGIAAGGVMDVNTALQEVLTALIHDLARGIREAAKALDKRQAHLCVLASNCDEPMYVKLVEALCAEHQIN
LIKVDDNKKLGEWVGLCKIDREGKPRKVVGCSVVVKDYGKESQAKDVIEEYFKCKK

WO 2004/030615

PCT/US2003/028547

2297/6881
FIGURE 2113

GGCCGCCTCGCACCCGGAACAACAAAGCAAGGAAGACGGAGTCCGAGCCTCGGGGGCTCCTAGCAACGGGCCGGG
GCGGGAGTTCCATGGAGACTGGGGAGCGCGCCCGTCTCATCCTCATCCTTGTCCTCCAGCTTCTCCTTCGCATCC
GACGCAACCGGCAGCAGCGCTGCCGCCGCGTCCTCAGCCACCGCTCCCTCTTCCCACGGATGTGATCTTCGTGGT
GGAAAGCTAAATTTTAAACCACCCCAATGGATGCAGACAGTGATGTTGCATTGGACATTCTAATTACAAATGTA
GTCTGTGTTTTTAGAACAAGATGTCATTTAAACTTAAGGAAGATTGCTTTGGAAGGAGCAAATGTAATTTATAAA
CGTGATGTTGGAGTAATATTAATGAAGCTTAGAAAACCTAGAATTACAGCTACAATTTGGTCCTCAGGAAAAATT
ATTTGCACTGGAGCAACAAGTGAAGAAGAAGCTAAATTTGGTGCCAGACGCTTAGCCCGTAGTCTGCAGAACTA
GGTTTTCAGGTAATATTTACAGATTTTAAAGTTGTTAACGTTCTGGCAGTGTGTAACATGCCATTTGAAATCCGT
TTGCCAGAATTCACAAAGAACAATAGACCTCATGCCAGTTACGAACCTGAACTTCATCCTGCTGTGTGCTATCGG
ATAAAATCTCTAAGAGCTACATTACAGATTTTTTCAACAGGAAGTATCACAGTAACAGGGCCCAATGTAAAGGCT
GTTGCTACTGCTGTGGAACAGATTTACCCATTTGTGTTTGAAAGCAGGAAAGAAATTTTATAATTCACCACTTAA
TTGGTTAGAACTCTCTAACTGAGCACCTTTTAAACCTGCTGCACATTGGACTCAAAGGAAAAGTGGACCAACAAT
AATTGAGGAAATAGACTCTTTTATTCATTACGGCTACAGTGTAAGCTCCAGTCCCTTTGGATTTTATTCCAAAC
CTTGCTGTAATATAAAAGGAAGTTTACAAGACATGATATTGCTGCTTTTACAAAAGGACATTCTATTTATTTTCG
CAGTAATTCTCATGTCCCCATAAGCAGAGCTGTCACAGTGTGCACTACCTTAGATTGTTTTATTGTCGTCATTGT
TATTTTTTTCCATTTTGAGCTAATGTGTTTTATTTGTGAATAGTCTTTTACATTTTGTATGCTGAATATGGGCA
CCAAAGAACCTGTAAAAGTTATCTTTTTCAATTGAATGTGCACAAATAAAAGTTTGGA

WO 2004/030615

PCT/US2003/028547

2298/6881
FIGURE 2114

GCCGGGGAGGGACGCAGGCAGGCGGGCGGGCAGCGGGAGGCGGCAGCCCCGGTGCGGTCCCCGCGGCTCTCGGCGGA
GCCCCGCGCCCCGCCGCGCCATGGCCCCGAAGACCCCGGCACAGCATATATAGCAGTGACGAGGATGATGAGGACTT
TGAGATGTGTGACCATGACTATGATGGGCTGCTTCCCAAGTCTGGAAAACGTCACCTGGGGAAAAACAAGGTGGAC
CCGGGAAGAGGATGAAAACTGAAGAAGCTGGTGGAAACAGAAATGGAACAGATGACTGGAAAGTTATTGCCAATTA
TCTCCCGAATCGAACAGATGTGCAGTGCCAGCACCGATGGCAGAAAAGTACTAAACCTGAGCTCATCAAGGGTCC
TTGGACCAAAGAAGAAGATCAGAGAGTGATAGAGCTTGACAGAAATACGGTCCGAAACGTTGGTCTGTTATTGC
CAAGCACTTAAAGGGGAGAATTGGAAAACAATGTAGGGAGAGGTGGCATAACCACTTGAATCCAGAAGTTAAGAA
AACCTCCTGGACAGAAGAGGAAGACAGAATTATTTACCAGGCACACAAGAGACTGGGGAACAGATGGGCAGAAAT
CGCAAAGCTACTGCCTGGACGAACGTGATAATGCTATCAAGAACCACTGGAATTCTACAATGCGTCGGAAGGTTCGA
ACAGGAAGGTTATCTGCAGGAGTCTTCAAAAGCCAGCCAGCCAGCAGTGGCCACAAGCTTCCAGAAGAACAGTCA
TTTGATGGGTTTTGCTCAGGCTCCGCCCTACAGCTCAACTCCCTGCCACTGGCCAGCCCACTGTTAACAACGACTA
TTCTATTACCACATTTCTGAAGCACAAAATGTCTCCAGTCATGTTCCATACCCTGTAGCGTTACATGTAAATAT
AGTCAATGTCCCTCAGCCAGCTGCCGCAGCCATTCAGAGACACTATAATGATGAAGACCTTGAGAAGGAAAAGCG
AATAAAGGAATTAGAATTGCTCCTAATGTCAACCGAGAATGAGCTAAAAGGACAGCAGGTGCTACCAACACAGAA
CCACACATGCAGCTACCCCGGGTGGCACAGCACCACCATTTGCCGACCACACCAGACCTCATGGAGACAGTGCACC
TGTTTCCTGTTTGGGAGAACACCACTCCACTCCATCTCTGCCAGCGGATCCTGGCTCCCTACCTGAAGAAAGCGC
CTCGCCAGCAAGGTGCATGATCGTCCACCAGGGCACCATTCTGGATAATGTTAAGAACCTCTTAGAATTTGCAGA
AACACTCCAATTTATAGATTCTTTCTTAAACACTTCCAGTAACCATGAAAACCTCAGACTTGGAAATGCCTTCTTT
AACTTCCACCCCCCTCATTGGTCAAAATTGACTGTTACAACACCATTTTCATAGAGACCAGACTGTGAAAACCTCA
AAAGGAAAATACTGTTTTTAGAACCCAGCTATCAAAAGGTCAATCTTAGAAAGCTCTCCAAGAACTCCTACACC
ATTCAAACATGCACCTGCAGCTCAAGAAATTAAATACGGTCCCCCTGAAGATGCTACCTCAGACACCCTCTCATCT
AGTAGAAGATCTGCAGGATGTGATCAAAACAGGAATCTGATGAATCTGGAATTGTTGCTGAGTTTCAAGAAAATGG
ACCACCCTTACTGAAGAAAATCAAAACAAGAGGTGGAATCTCCAAGCTGATAAATCAGGAACTTCTTCTGCTCACA
CCACTGGGAAGGGGACAGTCTGAATACCCAAGTGTTCACGACAGCTCGCTGTGGCAGATGCACCGAATATTCT
TACAAGCTCCGTTTTAATGGCACCAGCATCAGAAGATGAAGACAATGTTCTCAAAGCATTTCAGTAGCTACCTAAAA
CAGGTCCCTGGCGAGCCCCCTTGACGCTTGTAGCAGTACCTGGGAACCTGCATCCTGTGGAAAGATGGAGGAGCA
GATGACATCTTCCAGTCAAGCTCGTAAATACGTGAATGCATTCTCAGCCCGGACGCTGGTCATGTGAGACATTTTC
CAGAAAAGCATTATGGTTTTTCAGAACACTTCAAGTTGACTTGGGATATATCATTCCTCAACATGAAACTTTTCAT
GAATGGGAGAAGAACCTATTTTTGTTGTGGTACAACAGTTGAGAGCAGCACCAAGTGCATTTAGTTGAATGAAGT
CTTCTTGGATTTACCCAACTAAAAGGATTTTTTAAAAATAAATAACAGTCTTACCTAAATTATTAGGTAATGAAT
TGTAGCCAGTTGTTAATATCTTAATGCAGATTTTTTTTAAAAAAAACATAAAATGATTTATCTGTATTTTAAAGGA
TCCAACAGATCAGTATTTTTTCTGTGATGGGTTTTTTGAAATTTGACACATTAAAAGGTACTCCAGTATTTTAC
TTTTCTCGATCACTAAACATATGCATATATTTTTTAAAAATCAGTAAAAGCATTACTCTAAGTGTAGACTTAATAC
CATGTGACATTTAATCCAGATTGTAAATGCTCATTTATGGTTAATGACATTGAAGGTACATTTATTGTACCAAAC
CATTTTATGAGTTTTCTGTTAGCTTGCTTTAAAAATTATTACTGTAAGAAATAGTTTTATAAAAAATTATTTTT
TATTCAGTAATTTAATTTTGTAAATGCCAAATGAAAAACGTTTTTTTGCTGCTATGGTCTTAGCCTGTAGACATGC
TGCTAGTATCAGAGGGGCAGTAGAGCTTGGACAGAAAGAAAAGAACTTGGTGTAGGTAATTGACTATGCACTA
GTATTTTACAGCTTTTTAATTTTATATATATATACATTTTTTTTCTTCTGCAATACATTTGAAAACCTGTTTGGG
AGACTCTGCATTTTTTATTGTGGTTTTTTTGTATTGTTGGTTTTATACAAGCATGCGTTGCACTTCTTTTTTGGG
AGATGTGTGTTGTTGATGTTCTATGTTTTGTTTTGAGTGTAGCCTGACTGTTTTTATAATTTGGGAGTTCTGCATT
TGATCCGCATCCCTGTGGTTTTCTAAGTGTATGGTCTCAGAACTGTTGCATGGATCCTGTGTTTGCAACTGGGGA
GACAGAACTGTGGTTGATAGCCAGTCACTGCCTTAAGAACATTTGATGCAAGATGGCCAGCACTGAACTTTTGA
GATATGACGGTGTACTTACTGCCTTGTAGCAAAATAAAGATGTGCCCTTATTTT

WO 2004/030615

PCT/US2003/028547

2299/6881
FIGURE 2115

MARRPRHSIYSSDEDDFEMCDHDYDGLLPKSGKRHLGKTRWTREDEKLKKLVEQNGTDDWKVIANYLPNRTD
VQCQHRWQKVLNPELIKGPWTKEEDQRVIELVQKYGPKRWSVIAKHLKGRIGKQCRERWHNHLNPEVKKTSWTEE
EDRIIYQAHKRLGNRWAEIAKLLPGRTDNAIKNHWNSTMRRKVEQEGYLOESSKASQPAVATSFQKNSHLMGFAQ
APPTAQLPATGQPTVNNDYSYYHISEAQNVSSHVPYPVALHVNIVNVPQAAAAIQRHYNDEDPEKEKRIKELEL
LLMSTENELKGQQLPTQNHTCSYPGWHSTTIADHTRPHGDSAPVSCLGHHSTPSLPADPGSLPEESASPARCM
IVHQGTILDNVKNLLEFAETLQFIDSFLNTSSNHENSLEMPSLTSTPLIGHKLTVTTPFHRDQTVKTQKENTVF
RTPAIKRSILESSPRTPPFKHALAAQEIKYGPLKMLPQTPSHLVEDLQDVIKQESDESGIVAEFQENGPPLLKK
IKQEVESPTDKSGNFFCSHHWEGDSLNTQLFTQTSPVADAPNILTSSVLMAPASEDEDNVLKAF TVPKNRSLASP
LQCSSTWEPASCGKMEEQMTSSSQARKYVNAFSARTLVM

WO 2004/030615

PCT/US2003/028547

2300/6881
FIGURE 2116

CTCCCTGTCGCCGCGGAGGGGCGGGGGCAGGACGCGCAACTCCGGCCGGAGCTGTCCGGGGTCGTGAGCCGGCCC
CGCCTTGTTGGTGGCGGCGCCCCCTCGCGGTCCAGAGGCAGACGCATCGGGTGGGCTCGGGTCTCCAGCCCGGCCGGG
AGGAGGGACCGGGTCTGCGGAGCGGGGACTCGGGGCCTCGGCGGGGCGCGCACACGCAGGCGGGGCGGCCCGGGG
TGCGGGGCCTCTGCGCGGCTGACCAGGCTCCCAGAGCGTCAGCGCCGCCCATGGCCGAGCCGCTCCAGCCAGACC
CCGGGGCGGCCGAGGACGCGGCGGCCCAAGCTGTGGAGACGCCGGGCTGGAAGGCCCGGAGGACGCCGGCCCCC
AGCCCGGAAGTTATGAGATCCGACACTATGGACCAGCCAAGTGGGTGAGCACGTCCGTGGAGTCTATGGACTGGG
ATTGAGCCATCCAGACGGGCTTTACGAACTGAACAGCTACATTCAAGGCAAAAACGAGAAAGAGATGAAAATAA
AGATGACAGCTCCAGTGACAAGCTACGTGGAGCCTGGTTTCAGGTCTTTTTAGTGAGTCTACCATTACCATTTCCT
TGTATATTCCCTCTGAACAGCAATTTGATCCACCCAGGCCTTTAGAGTCAGATGTCTTCATTGAAGATAGAGCCG
AAATGACTGTGTTTGTACGGTCTTTTCGATGGATTTTCTAGTGCCCAAAGAATCAAGAACAACCTTTGACATTAG
CAAGCATTTTAAGGGAAGATGGAAAAGTTTTTCGATGAGAAGGTTTACTACACTGCAGGCTACAACAGTCCTGTCA
AATTGCTTAATAGAAATAATGAAGTGTGGTTGATTCAAAAAAATGAACCCACCAAGAAAACGAATTGAAAAAAT
GAAAGGAAGTTCTGCTGTCAGAGGCAAAACATCTGTTTATCATAGACATCAACATGACCTATAAGTAAAGTGCCT
GTCTAGTGTCTTCTATTGAGAGTACTACTATTAATTAAGCTTATTTCCAATGTGCCTTTTTAATGCTTGAAGTTT
TATCTACATACACAGGTAACAGAGGACAGTAGTCTGTAAACATATAAATCGGTCATAACTATCGTGGTCTTTATT
TCTGTGAGGATC

WO 2004/030615

PCT/US2003/028547

2301/6881
FIGURE 2117

MAEPLQDPGAAEDAAAQAVETPGWKAPEDAGPQPGSYEIRHYGPAKWVSTSVESMDWDSAIQTGFTKLNSYIQG
KNEKEMKIKMTAPVTSYVEPGSGPFSESTITISLYIPSEQQFDPPRPLESDVFIEDRAEMTVFVRSFDGFSSAQK
NQEQLLTLASILREDGKVFDEKVYYTAGYNPVLNRRNNEVWLIQKNEPTKENE

WO 2004/030615

PCT/US2003/028547

2302/6881
FIGURE 2118

AGAACCACCACAACAAATAACCAGCCTGGCAGTCAATTCTTCCTATGGACTGGTGGTTTTTGGCAATTGCAATGG
CATTGCTATGGTTGACTACCTCCAGAAAGCAGTGCTGCTCAACCTGGGCACTATTGAATTATATGGCTCTAATGA
TCCTTATCGGAGAGAACCCCGATCTCCTCGTAAATCTCGACAGCCTTCAGGAGCCGGTCTGTGTGATATTAGTGA
AGGGACTGTTGTTCCAGAGGATCGCTGCAAATCTCCAACCTCTGCAAAGATGTCAAGGAAGTTAAGCTTACCTAC
TGACCTAAAGCCTGATTTAGATGTAAAGGATAACTCCTTTAGCCGATCACGGAGTTCAAGTGTAAACAAGCATTGA
CAAAGAATCCCGAGAAGCGATCTCCGCTCTTCATTTCTGTGAAACGTTTACTCGAAAGACGGACTCGTCCCCTTC
CCCTTGCTATGGGTTGGAACAACGCTAGGAACAGTGCTTGTCTATTGCACTGAACCTTCCCCAGGGGGAGAGCA
AAGACTTCTTCAGCCAGTAATTGTGTCTCCAAGTGGTACTATATTGAGGTTAAAAGGTGCAATCTTGAGAATGGC
ATTTCTGGATAACCACAGGCTGCTTAATACCACCTGCGTATGAACCCTGGAGAGAGCACAAATGTTCTGAAGAAAA
AGACGAAAAGGAGAAATTGAAAAACGGCGGCCTGTCTCAGTATCCCCCTCCTCTTCTCAGGAAATTAGTGAAAA
CCAGTATGCAGTGATATGTTCTGAAAAGCAAGCAAAAGTAATCTCACTGCCAACCCAGAAGTGTGCTTATAAGCA
AAATATTACAGAGACCTCGTTTGTGCTTCGTGGAGATATTGTAGCATTGAGTAACAGTATCTGCCTTGCCGTGTTT
CTGTGCCAATGGACATATAATGACTTTTAGTTTGCCAAGTTTAAAGACCTCTGTTGGATGTGTATTACTTGCCCT
TACCAATATGCGGATAGCCAGAAGCTTCTGCTTTACCAACAATGGACAAGCATTATACCTTGTTTACCTACAGA
AATCCAGAGACTTACTTATAGTCAAGAGACCTGTGAAAATCTTCAGGAAATGTTGGGTGAACCTCTTCACTCCTGT
AGAAACACCTGAAGCACCAACAGGGGATTCTTTAAAGGCTTATTTGGAGGTGGTGACAATCTCTTGACAGAGA
AGAACTATTTGGAGAATCGTCTCAGGAAAGGCTTCAAGGAGCCTTGACAGCATATTCCTGGCCCTGGTGGCAT
TGAAGGCGTAAAAGGGGAGCATCTGGAGTTGTTGGTGAATTAGCACGAGCCAGGCTGGCACTAGATGAAAGAGG
GCAGAACTTGGCGATCTGGAAGAAAGAACTGCGGCCATGTTATCAAGTGCAGAGTCATTTTCTAAACATGCTCA
TGAGATTATGTTGAAATACAAAGATAAGAAGTGGTACCAGTTCTGACAACCAGAATCCAATAAGTCCAATTTCAG
CCAGAAGGAAAAAAGTTTTCCATTTTTATTACATTCTTTAGGAAAGTTAACGTTAAAGGGATGTTTCGTCCTGAA
TACTGTTCTTTCTAGCACAGTCATGCACTGTTTTACCTCAGTCATGTGGCTTTAACTGAGGAGTGTTACACGC
ACTCGAAATGGAGTATATGGTGTGTGCCAGTTATGAGTTGACCATTTGGGAATTAAACAGGTCACACGTGACAGA
TGAAGAAACCAAGGGGGCTGCTGAGGAGACCTGGTGAGGGACTAATCCTGGATCATTCTGTATTAACTTTTCA
TATGCCAAAAGGGTTTGTGCCGTTTTATCTGCCATCAGTGTTTGACCTGTTTAGGGCAGAGGCAATAAGTCAGAA
GTCTTGAAGTTGAAATAGTTATATGTGTGTCATTGGACTGGATTATAAACAGCTGTCTTGGACTTTCCCTCTCTT
AACACTGACTGGTCATCAGTATCATTAGTGAAAAAGAAACAAATTGTTTGTATCATCTCTTTAGACAGATAAGC
TGAATGGTGGGCTTTAAATAATAAAAAACATACATAGTTGACTTGTGTATGAGCTACTCTTGGAATTCTTGTTAT
TATAGACTTGTATTTAGTTTCATATTTTGTCAAAAGCAAAACAAGAAGATACATCACTTTTTCATTGAAAAGAAAAG
TGTAAGCATGACTGAATTGCTCATCATTCTGGGAGTTTCCATGTAGTGGCTATGCAGTGTGAAAGTGAGAAAA
ACCTCCATTGTGGTGAGGAGAATACTTCAATGTCCCTTGCTCTTGTCTCATTAAATTCAGCTAAAGGTGGATTTG
ACCAAAATAATGCTGGTTAAATTTGTAGAAATGTTGAAATTGGCTGTGTTTTAAATTTTGCCTTGAATTTTTATAA
AATGTTTAAACCAATGTACCTTTGCATTCTTTAATTAAATTGCTT

WO 2004/030615

PCT/US2003/028547

2303/6881
FIGURE 2119

TTTTTCGTCTGGGCTGCCAACATGCCATCCAGACTGAGGAAGACCCGGAACTTAGGGGCCACGTGAGCCACCGC
CACGGCCGCATAGGCAAGCACCGGAAGCACCCCGGCGGCCGCGGTAATGCTGGTGGTCTGCATCACCACCGGATC
AACTTCGACAAATACCACCCAGGCTACTTTGGGAAAGTTGGTATGAAGCATTACCACTTAAAGAGGAACCAGAGC
TTCTGCCCAACTGTCAACCTTGACAAATTGTGGACTTTGGTCAGTGAACAGACACGGGTGAATGCTGCTAAAAAC
AAGACTGGGGCTGCTCCCATCATTGATGTGGTGCGATCTGGCTACTACAAAGTTCTGGGAAAGGGAAAGCTCCCC
AAGCAGGCTGTCACCGTGCAGGCCAAATTCTTCAGCAGAAGAGCTGAGGAGAAGATTAAGAGTGTTGGGGGGGCC
TGTGTCCTGGTGGCTTGAAGCCGCATGGAGGGAGTTTCATTAAATGCTAACTACTTAAAAAAAAAAAAAGAAGAA
GAAGAAGAAGAAAAA

WO 2004/030615

PCT/US2003/028547

2304/6881
FIGURE 2120

MPSRLRKTRKLRGHVSHRHGRIGKHKHPGGRGNAGGLHHHRINFDKYHPGYFGKVG MKHYHLKRNQSF CPTVNL
DKLWTLVSEQTRVNAAKNKTGAAP IIDVVRSGYYKVLGKGKLPQAVTVQAKFFSRRAEEKIKSVGGACVLVA

WO 2004/030615

PCT/US2003/028547

2305/6881
FIGURE 2121

ATGCGGTCCCGGGTTCTGTGGGGCGCTGCCCGGTGGCTCTGGCCCCGCCGGGCCGTTGGCCCAGCCCCGCCGGCCC
CTGAGCTCCGGTAGCCCGCCGCTGGAGGAGCTGTTACCCGGGGCGGGCCCTTGCGGACCTTCCTCGAGCGCCAG
GCGGGGTCTGAAGCCCATTGAAGGTCAGGAGGCCCGAGTTGCTGGCGGTGATCAAAGTGTGAACGAGAAGGAG
CGGGAGCTGCGGGAGACTGAGCACTTGCTGCACGGTAAGGGTCGGGCCCCGGGGGAGAGGCGTCAGAGCACATTCT
TGACTCTTCGTTTGACTTTTCCACTGCCACACTACCCGAGTTTGAACTCTTTACTCACTTGCAGCCGTTTTTA
TTTTGGATCAGAGGTCAGGACATCATTACGTGCTGTGATCCCATCCTCTCCTGTGGGCTCTCTTGCTCCTTTG
CCACGGCGCTCTGCCGCCCTTTTACATGCTTATTAGTTGTGGACTCGGGCAAGAGCTCATTAGCTCAGCAAGGATA
AATAAGGCACTGTCCCTGTGATGGGCTCCACAGCGGTGTTTCTCAAAGTGTGGTGTGGAGACCCATTGTCAGTAG
TATCAGGGCAGTGCTTGTTAATAGCAGACTTAGGACTCAGAATCTCAGACCTATACGTGGGTAAAGGTACTAAAT
TGGGAAATTCAGTATGGCCTAAGTATAGAATAGGTGGGAGATGATGTCATAGAAACATGAAGCCAGAAAAATAGT
TAAGAACCTTGCAAGACAAAGAATTTGGATTTATTTTTTATAGACCATGGAAAGTTAGCAAATGTTTTTAAGCAG
AGAATTCACGTCTTTGTAAAGAAAAAGTTAATGGTGGCATGCGCTGAGGATAAATTGGAGTATTCTCCAGAAACGC
TGGTGGCTGACAGGCCAGGGAGGAGGCAGTTGAAACAATCCAAAGAAGAAATGGTGATAGGCATAGTTCTGACTC
ACAAAACATTTTGAGAAACAAGTTAGGATTTAGTGGCTTATGCCCTGAGAAGGATGAGGGAGAGAGTTAGTTCTA
AGAAAAGTCTTAGGTTTCTGGCTTCAGCACGAGTGGTACTGTTAATTAAGATGAAAGTATAAAAGTTGGACCGAA
TTTTTTAAAAAGATGAGTTTTGCATTGAATGCCATATTAAGTTAAAAATACCTGTGAAAAGGAATTCCAATAAAG
ATATCTGTACTAGTCTAGGAGAAAAAATTACTGACATAGGAGAAAAATTGAGCCCAAATAATCATATGAGAGCTC
TCGAGATATACAGTACGTGGTAAATTAACCTTAGAAGTAGATGAGAACACTCAGGGAAAATGTGTTAAGATAGA
AACAAAGTCTAACAAAGGCCAGAAATACACAGTATTTGAGGAGCAGGCAGAGAAGAAGGCTATAAAAGGTCAAGAAA
AAAAACAGCCAGAGCTTTGTGACCCTGAAGTAGATAAATAAATGAAGCTGTAGAAGCCAATAGAAAATTTCAAGAA
GTAAGAGATCCTTGGCCAGGCGTGGTGGCTCACGCCTCTAATTCCAGCACTTTGAGAGGCTCAGGTGGGCCGATC
ACTTGAGCCCAGGAGTTTCGAGACCAGCCTGGGTAAACATGGCAAAACCCTGTCTCTACAAACAATGCAAAATTAGC
TGGGCATGGTGGTGCCTGTGGTCCCAGCTACTTGAGAGGCTGAGGTGGGAGAATCGCTTGAACCCGGGAGG
TGGAGGTTGCAGTGAGCCAAGATGGTGCCACTGCATTCCAGCCTGGGTGACAGCGCAAGACCTGCCTC

WO 2004/030615

PCT/US2003/028547

2306/6881
FIGURE 2122

ATGCGGTCCCGGTTCTGTGGGGCGCTGCCCGGTGGCTCTGGCCCCGCCGGGCCGTTGGCCCAGCCCGCCGGCCC
CTGAGCTCCGGTAGCCCGCCGCTGGAGGAGCTGTTACCCGGGGCGGGCCCTTGCGGACCTTCCTCGAGCGCCAG
GCGGGGTCTGAAGCCCATTGAAGGTCAGGAGGCCCGAGTTGCTGGCGGTGATCAAACCTGCTGAACGAGAAGGAG
CGGGAGCTGCGGGAGACTGAGCACTTGCTGCACGATGAGAATGAAGATTTAAGGAACTTGCAGAGAATGAAATC
ACTTTGTGTCAAAAAGAAATAACTCAGCTGAAGCATCAGATTATCTTACTTTTGTTCCCTCAGAAGAAACAGAT
GAAATGATTGATCCTGGAGTAAGTGCAGGAGTTGGAGGTCAGGAGGCAATGTTGTTTACATCAGAGATATTT
GATATGTATCAGCAATATGCTGCATTTAAAAGATGGCATTTTGAAACCCTGGAATATTTTCCAAGTGAAGTAGGT
GGCCTTAGACATGCATCTGCCAGCATTGGGGGTTTCAAGCCTATAGGCACATGAAATTTGAAGGAGGTGTTTAC
AGAGTACAAAGAGTGCCAAAGACAGAAAAGCAAGGCCGCTCCATACTAGCACCATGACTGTAGCAATATTACCC
CAGCCTACTGAGATTAATCTGGTGATTAATCCGAAAGATTTGAGAATTGACACTAAGCGAGCCAGTGGAGCTGGG
GGGCAGCATGTAAATACCACGGACAGTGCTGTCCGGATAGTTCATCTTCCAACAGGTGTTGTTTCTGAATGTCAA
CAAGAGAGATCTCAGCTGAAAAATAAAGAGCTGGCTATGACAAAGTTACGTGCAAACTGTACAGCATGCATCTA
GAAGAAGAAATAAATAAAGACAGAATGCTAGAAAAATTCAGATTGGAAGTAAAGGAAGATCAGAGAAAAATAAGA
ACATATAATTTTCCACAGAACCGGGTCACAGATCACAGAATAAACAAGACGCTGCATGATCTTGAAACTTTTATG
CAAGGAGATTATCTACTGGATGAAGTTGTACAGTCATTGAAGGAATACGCCGATTATGAATCTTTAGTAGAAATT
ATTTCCCAAAAAGTTTAA

WO 2004/030615

PCT/US2003/028547

2307/6881
FIGURE 2123A

CAAAAATCAGTCTGATCTCGGGAAACCTGGAGAAATTTATTTTCTGTACTCTAATGTTCTTTTCATTTTGGTGACC
ATCAAGGTGCTGGGAGAGGAATTAGATGGCTGTAATTCAAAGTTAATGGAATTAGATGCAGCAGTACAGAAATTC
TTGGAACAGAATGGCCAACTGGGTAAGCCACTGGCCAAGAAGATAGGAAAACCTGACTGAACTTCACCAGCAGACC
ATTAGACAAGCTGAGAATCGGCTCTCCAAGCTCAATCAGGCAGCATCACATTTAGAAGAATACAATGAAATGCTT
GAATTAATTTTGAAGTGGATTGAAAAAGCTAAAGTCTTGGCTCATGGAACCTATTGCATGGAATTCCTGCAAGCCAG
CTTCGGGAACAATATATTTTGCATCAGACCCTGCTAGAAGAATCCAAAGAAATTGACAGTGAGCTGGAAGCAATG
ACTGAGAAATTACAGTACCTACTAGCGTGTACTGTACAGAAAAATGTCTCAGCAAGTGGCAGAACTGGGACGG
GAGACTGAGGAGTTGCGACAGATGATCAAAATTCGTTTGCAGAACCTCCAAGATGCAGCTAAGGATATGAAAAA
TTTGAAGCAGAGTTGAAAAAGTTACAAGCTGCCTTGGAGCAAGCCCAGGCAACACTGACTTCTCCAGAAGTTGGA
CGTCTCAGTCTCAAGGAGCAGCTCTCTCATCGGCAGCATTTGTTGTCTGAGATGGAGTCACTGAAGCCGAAGGTG
CAAGCAGTGACGCTCTGCCAGAGTGCCCTCCGGATCCCCGAGGATGTGGTTGCCAGCTTACCTCTCTGTCTATGCT
GCTCTGCGGCTGCAGGAAGAGGCCAGCCGGCTGCAGCACACCGCCATCCAGCAGTGTAACATCATGCAGGAAGCT
GTGGTACAATATGAACAATATGAGCAAGAAATGAAACATCTCCAGCAACTGATAGAAGGAGCTCACAGAGAGATT
GAGGATAAACCTGTTGCCACCAAGTAACATACAGGAGCTGCAGGCTCAGATTTCTCGGCATGAGGAGCTGGCGCAG
AAAATTAAGGGCTACCAGGAGCAGATCGCTTCTTTGAATTCCAAGTGCAAGATGCTGACGATGAAAGCCAAGCAC
GCCACCATGCTGCTGACGGTGACCGAGGTCGAGGGGCTGGCGGAAGGGACAGAGGACCTGGATGGGGAGCTCCTC
CCCACGCCTTCGGCCACCCCTCTGTGGTCATGATGACTGCAGGTGCTGTACACTTTGCTGTACCCGGTCACT
GAGGAGTCTGGGGAGGAGGGAACCAACAGTGAGATTTCTCTCCACCTGCCTGTCTGCTCCCCCTTCACCTGTGGCT
AATACAGATGCTTCTGTTAACCAGGACATTGCATATTACCAAGCCTTGTCTGCTGAGAGGTTGCAGACAGATGCT
GCAAAAATTCACCCCAGCACATCCGCATCCCAGGAGTTCTATGAACCGGGATTGGAGCCATCCGCTACTGCCAAA
CTGGGTGATTTGCAGCGTCTTGGGAAACCTTAAAGAAATGTGATCAGTGAGAAGCAGCGCACACTCTATGAAGCT
TTGGAACGCCAGCAGAAGTACCAGGACTCCCTCCAGTCCATCTCTACGAAGATGGAGGCCATTGAGCTGAAACTC
AGTGAGAGCCCAGAGCCTGGCAGGAGTCCAGAAAGCCAGATGGCTGAACATCAGGCATTGATGGATGAGATTCTC
ATGCTCCAGGATGAAATCAATGAGCTCCAGTCTCTCTCGCAGAGGAGCTGGTATCCGAGTCTTGTGAGGCCGAC
CCTGCGGAGCAGCTGGCCTTGCACTCCAGCTCACTGTCTTAGCCGAGCGAATGTCCACCATCAGGATGAAAGCC
TCGGGGAAACGGCAGCTTTTGGAGGAGAAGTTGAATGATCAGCTGGAGGAACAAAGGCAGGAACAGGCCCTGCAG
AGGTATCGCTGTGAAGCCGATGAGCTGGACAGCTGGCTCTTGTAGTACCAAGGCCACTCTGGACACTGCGCTGAGT
CCACCCAAGGAGCCCATGGACATGGAGGCCAGCTTATGGACTGCCAGAATATGCTGGTGGAAATAGAGCAGAAG
GTGGTGGCTTTATCAGAACTGTCACTCCACAATGAGAACCCTGCTGCTGGAGGGCAAAGCTCACACCAAGGACGAG
GCCGAGCAGCTGGCTGGAAAGCTGAGAAGGCTCAAGGGGAGCCTGCTGGAGCTGCAGAGAGCCCTGCATGATAAG
CAGCTCAACATGCAGGGAACAGCACAGGAGAAGGAGAGCGATGTTGACCTAACAGCCACGCAGAGCCCCGGC
GTCCAGGAATGGCTGGCCCAAGCTCGCACCACATGGACCCAGCAGCGGCAGAGCAGTCTCCAGCAACAAAAAGAG
TTAGAACAGGAATTAGCCGAGCAGAAGAGTCTCCTTCGCTCAGTAGCCAGTCTGGAGAGGAGATTCTAATTCAA
CATTTCGGCGGCAGAGACCTCTGGTGATGCTGGCGAAAAACCTGATGTGTTATCCCAGGAGTTGGGGATGGAAGGG
GAGAAATCATCCGCTGAAGACCAGATGAGAATGAAATGGGAAAGCCTACATCAAGAATTTAGTACCAAGCAGAAA
CTACTACAGAATGTTCTGGAACAGGAACAAGAGCAAGTGCTTTATAGCAGGCCAAATCGACTCTTGTCTGGTGTG
CCACTGTACAAAGGGGACGTGCCAACCCAAGATAAATCTGCAGTTACATCTTGTCTGGATGGACTGAACCAAGCC
TTCGAGGAGGTTTCATCCCAGAGTGGAGGGGCAAAGAGGCAGAGTATACACTTGGAGCAGAAGTTGTATGATGGA
GTCTCAGCCACCTCTACTTGGTTGGATGACGTTGAAGAACGTTTATTTGTTGCCACAGCACTTTTACCAGAAGAA
ACAGAGACTTGTCTCTTCAACCAAGAGATTCTTGCCAAAGACATTAAGGAAATGTCTGAAGAAATGGATAAGAAC
AAAACTTGTTTTCCCAAGCTTTTCCAGAGAATGGTGATAATCGAGATGTTATTGAAGATACTTTGGGTGTCTT
TTGGGCAGGTTATCCTTGCTAGACTCAGTAGTGAATCAACGATGTCATCAGATGAAAGAAAGACTTCAGCAAATA
CTAAATTTCCAGAATGATCTGAAAGTGCTGTTTACATCACTGGCTGACAACAAATACATCATTCTGCAAAAACCTG
GCAATGTGTTTGAACAGCCCGTAGCAGAACAAATAGAGGCAATACAACAGGCTGAAGATGGACTCAAAGAAATTT
GATGCAGGAATCATTGAATTAAGAGGCGTGGTGACAAGCTACAGGTCGAGCAGCCGTCATGCAAGAACTCTCC
AAGCTCCAGGACATGTATGATGAGCTGATGATGATCATTGGCTCCCGGAGGAGTGGTCTGAATCAGAACCTTACA
CTCAAGAGTCAGTATGAGAGGGCCCTACAAGATCTGGCTGACCTGCTAGAACTGGTCAGGAGAAGATGGCAGGA
GACCAGAAAATCATCGTGTCTTCCAAAGAGGAAATCCAGCAACTACTTGACAAACATAAGGAATACTTTCAGGGC

WO 2004/030615

PCT/US2003/028547

2308/6881
FIGURE 2123B

CTGGAATCTCATATGATCTTGACTGAAACACTCTTCAGAAAGATAATCAGCTTTGCAGTCCAAAAGGAAACCCAG
TTCCATACAGAGCTGATGGCTCAGGCTTCTGCTGTACTGAAACGGGCTCACAAAGAGGGGTGTGGAGCTGGAGTAC
ATTCTAGAGACGTGGTCCCATCTGGATGAGGACCAGCAGGAGCTCAGCAGACAGCTGGAGGTGGTGGAAAGCAGC
ATCCCAAGCGTGGGTCTGGTGGAGGAGAACGAGGACAGGCTTATTGACCGCATAACACTCTACCAGCATTAAAA
TCTAGCCTTAATGAATACCAGCCCAAATTATATCAAGTATTAGATGATGGGAAACGACTTCTGATATCCATCAGC
TGCTCAGATCTAGAAAGCCAACTAAATCAACTTGGAGAGTGTGGCTAAGTAACACCAATAAAATGTCTAAGGAA
CTTCACAGACTGGAAACAATATTGAAACACTGGACCAGATATCAAAGTGAATCTGCAGATCTAATTCACTGGTTA
CAATCTGCAAAAGACCGGCTAGAATTTTGGACTCAGCAATCTGTGACAGTCCCACAAGAGCTGGAAATGGTCCGT
GATCATCTAAATGCTTTCTGGAGTTTTCTAAAGAAGTGGATGCCCAATCTTCCCTGAAATCATCTGTTCTGAGT
ACTGGAAATCAGCTCCTTCGACTAAAAAAGGTGGACACAGCCACGCTGCGCTCTGAGCTGTGCGCATTGATAGC
CAGTGGACTGACCTGCTAACCAATATCCCAGCCGTCCAGGAGAAGCTCCACCAGCTCCAGATGGATAAACTGCCT
TCCCGCCATGCCATTTCTGAAGTCATGAGTTGGATTTCTCTAATGGAAAATGTTATTGAGAAGGATGAAGATAAT
ATTAATAATTCATAGGTTACAAGGCAATTCATGAATACCTTCAGAAATATAAGGGTTTTAAGATAGACATTAAC
TGTAACAGCTGACAGTGGATTTTGTGAACAGTCCGTGCTACAAATCAGCAGTCAGGATGTGGAAAGTAAGCGT
AGTGATAAGACTGATTTTGTCTGAGCAACTTGGAGCAATGAATAAAAGTTGGCAAATCTGCAAGGTCTAGTAAC
GAGAAGATCCAGCTGTTGGAAGGCTTATTGGAATCTTGGTCAGAAATATGAAAATAATGTACAATGTCTGAAAACA
TGGTTTGAACCCAGGAAAAGAGACTAAAACAACAGCATCGAATTGGAGATCAGGCTTCTGTTCAAAATGCACTG
AAAGACTGTCTAGGATCTGGAAGATTTGATTAAAGCAAAAGAAAAAGAGTAGAGAAAATTGAGCAGAATGGACTT
GCTTTGATTTCAGAACAAAGAAAGACGTCTCTAGCATTGTCTGAGCACACTGCGAGAGCTCGGCCAAACCTGG
GCAAATTTAGATCATATGGTTGGACAATTAAGATACTGTGAAATCAGTGCTTGACCAATGGAGTAGTCACAAA
GTGGCCTTTGACAAGATAAACAGTTACCTCATGGAGCCAGATACTCTCTTTCCCGATTCCGTCTGCTGACTGGC
TCCTTAGAAGCTGTGCAAGTTAGGTTGACAATCTTCAGAAATCTCCAAGATGATCTGGAACAAACAGGAAAGGAGC
TTACAGAAATTTGGCTCTATCACCACCAATTTATTAAGAGTGTACCCACCCGTGACAGAACTCTTACCAAT
ACACTGAAAGAAGTCAACATGAGATGGAATAACTTGCTGGAAGAGATTGCTGAGCAGCTACAGTCCAGCAAGGCC
CTACTTCAGCTTTGGCAAAGATACAAGGACTACTCCAAACAGTGTGCTTCGACAGTTTCAGCAGCAGGAGGATCGA
ACCAATGAGCTGTTGAAGGCAGCCACAAACAAGGACATTGCCGATGATGAGGTTGCCACATGGATTCAAGATTGC
AACGACCTCCTCAAAGGACTGGGCACAGTTAAAGATTCCCTCTTTTTCTCCATGAGCTGGGAGAGCAACTGAAG
CAACAAGTGGATGCTTCCGCAGCATCAGCTATTCAATCGGATCAACTCTCTTTGAGTCAACACTTGTGTGCCCTG
GAGCAAGCTCTCTGCAACAGCAGACTTTCATTACAGGCTGGAGTTCTTGATTATGAAACCTTTTGCCAAGAGTTTA
GAAGCTTTGGAGGCCCTGGATAGTGAAGCTGAAGAAATACTACAAGGGCAGGACCCTAGCCACTCATCTGACCTC
TCCACAATCCAGGAAAGGATGGAAGAACTTAAGGGACAGATGTTAAAAATTCAGCAGCATGGCTCCAGATTTAGAC
CCTCTAAATGAGCTTGGATATAGGTTACCTTGAATGATAAGGAAAATCAAAAAGATGCAGAATCTGAACCGCCAT
TGGTCTCTGATCTCTCTCAGACTACAGAAAGATTGAGCAAGTTGCAGTCATTTTGTCTACAACATCAGACTTTC
TTGGAAAAATGTGAAACATGGATGGAATTCCTAGTTCAGACAGAACAAAAGTTAGCAGTAGAGATTTTCAAGAAAT
TATCAGCACCTTTTGGAACAGCAGAGAGCACACGAGTTGTTTCAAGCCGAGATGTTTCAGTCGTCAGCAGATTTTG
CACTCAATCATTATTGATGGGCAACGCTTCTAGAACAAAGGTCAAGTTGATGACAGGGATGAATTCAACCTGAAA
TTGACACTCCTCAGTAATCAATGGCAGGGAGTGATTGCGAGGGCCCAGCAGAGGCGGGGGATCATTGACAGCCAG
ATTGCGCAGTGGCAGCGCTATAGGGAGATGGCAGAAAAGCTTCGTAAATGGTTGGTTGAAGTGTCTACCTCCCC
ATGAGTGGTCTCGGAAGTGTTCCTATACCACTGCAACAAGCAAGGACCTCTTTGATGAAGTGCAGTTCAAAGAA
AAAGTGTCTCTCGGCAACAAGGCAGCTACATCTGACTGTGGAGGCTGGCAAGCAACTCCTTCTCTCGGCGGAC
AGTGGCGCTGAGGCCGCTTGCAGGCCGAACCTCGTGAAATCCAAGAGAAATGGAAATCAGCCAGCATGCGGCTG
GAAGAACAGAAGAAAAAACTAGCCTTCTGTTGAAAGACTGGGAAAAATGTGAGAAAGGAATAGCAGATTTCCCTG
GAGAACTACGAACCTTCAAAAAGAAGCTTTCGAGTCTCTCCCGATCACCATGAAGAGCTCCATGCAGAACAA
ATGCGTTGCAAGGAATTAGAAAATGCAGTTGGGAGCTGGACAGATGACTTGACCCAGTTGAGCCTGCTGAAGGAC
ACCTCTCTGCTATATCAGTGCTGATGATATCTCCATTCTTAATGAACGCGTAGAGCTTCTGCAAGGCAGTGG
GAAGAACTATGCCACCAGCTCTCCTTAAGGCGGCAGCAATAGGTGAAAGATTGAATGAATGGGCAGTCTTCAGT
GAAAAGAACAAGGAACCTCTGTGAGTGGTTGACTCAAATGGAAGCAAGTTTTCTCAGAAATGGAGACATTCTCATT
GAAGAAATGATAGAGAAGCTCAAGAAGGATTATCAAGAGGAAATTGCTATTGCTCAAGAGAACAAAATACAGCTC

WO 2004/030615

PCT/US2003/028547

2309/6881
FIGURE 2123C

CAACAAATGGGAGAACGACTTGCTAAAGCCAGCCATGAAAGCAAAGCATCTGAGATTGAATACAAGCTGGGAAAG
GTCAACGACCGGTGGCAGCATCTCCTGGACCTCATTGCAGCCAGGGTGAAGAAGCTGAAGGAGACCCTGGTAGCC
GTGCAGCAGCTTGATAAGAACATGAGCAGCCTGAGGACCTGGCTCGCTCACATCGAGTCAGAGCTGGCCAAGCCA
ATAGTCTACGATTCTGTAACTCGGAAGAAATACAGAGAAAGCTTAATGAGCAGCAGGAGCTTCAGAGAGACATA
GAGAAGCACAGTACAGGTGTTGCATCTGTCTCAACCTGTGTGAAGTCCTGCTGCACGACTGTGACGCCTGTGCC
ACTGATGCCGAGTGTGACTCTATACAGCAGGCTACGAGAAACCTGGACCGGCGGTGGAGAAACATTTGTGCTATG
TCCATGGAAAGGAGGCTGAAAATCGAAGAGACGTGGCGATTGTGGCAGAAATTTCTGGATGACTATTACGTTTT
GAAGATTGGCTGAAGTCTTCAGAAAGGACAGCTGCTTTTCCAGCTCTTCTGGGGTGATCTATACAGTTGCCAAG
GAAGAACTAAAGAAATTTGAGGCTTTCCAGCGACAGGTCCACGAGTGCCTGACGCAGCTGGAACCTGATCAACAAG
CAGTACCGCCGCTGGCCAGGGAGAACCGCACTGATTTCAGCATGTAGCCTCAAACAGATGGTTCACGAAGGCAAC
CAGAGATGGGACAACCTGCAAAAGCGTGTACCTCCATCTTGCGCAGACTCAAGCATTTTATTGGCCAGCGTGAG
GAGTTTGAGACTGCGCGGGACAGCATTCTGGTCTGGCTCACAGAGATGGATCTGCAGCTCACTAATATTGAACAT
TTTTCTGAGTGTGATGTTCAAGCTAAAATAAAGCAACTCAAGGCCTTCCAGCAGGAAATTTCACTGAACCACAAT
AAGATTGAGCAGATAATTGCCCAAGGAGAACAGCTGATAGAAAAGAGTGAGCCCTTGGATGCAGCGATCATCGAG
GAGGAAC TAGATGAGCTCCGACGGTACTGCCAGGAGGTCTTCGGGCGTGTGGAAAGATACCATAAGAAACTGATC
CGCCTGCCTCTCCAGACGATGAGCACGACCTCTCAGACAGGGAGCTGGAGCTGGAAGACTCTGCAGCTCTGTCTG
GACCTGCACTGGCACGACCGCTCTGCAGACAGCCTGCTTTCTCCACAGCCTTCCTCCAATCTCTCCCTCTCGCTC
GCTCAGCCCCCTCCGGAGCGAGCGGTGAGGACGAGACACCCCGGCTAGTGTGGACTCCATCCCCCTGGAGTGGGAT
CACGACTATGACCTCAGTCGGGACCTGGAGTCTGCAATGTCCAGAGCTCTGCCCTCTGAGGATGAAGAAGGTCAG
GATGACAAAGATTTCTACCTCCGGGGAGCTGTTGGCTTATCAGGGGACCACAGTGCCTTAGAGTCACAGATCCGA
CAACTGGGCAAAGCCCTGGATGATAGCCGTTTTCAGATACAGCAAACCGAAAATATCATTCCGAGCAAAACTCCC
ACGGGGCCCGAGCTAGACACCAGCTACAAAGGCTACATGAACTGCTGGGCGAATGCAGTAGCAGTATAGACTCC
GTGAAGAGACTGGAGCACAACTGAAGGAGGAAGAGGAGAGCCTTCCTGGCTTTGTTAACCTGCATAGTACCGAA
ACCCAAACGGCTGGTGTGATTGACCGATGGGAGCTTCTCCAGGCCCAGGCATTGAGCAAGGAGTTGAGGATGAAG
CAGAACCTCCAGAAGTGGCAGCAGTTTAACTCAGACTTGAACAGCATCTGGGCCTGGCTGGGGGACACGGAGGAG
GAGTTGGAACAGCTCCAGCGTCTGGAACCTCAGCACTGACATCCAGACCATCGAGCTCCAGATCAAAAGCTCAAG
GAGCTCCAGAAAGCTGTGGACCACCGCAAAGCCATCATCTCTCCATCAATCTCTGCAGCCCTGAGTTCACCCAG
GCTGACAGCAAGGAGAGCCGGGACCTGCAGGATCGTTGTGCGCAGATGAATGGGCGCTGGGACCGAGTGTGCTCT
CTGCTGAGGAGGATGGCGGGGCTGCTGCAGGATGCCCTGATGCAGTGCCAGGGTTTCCATGAAATGAGCCATGGT
TTGCTTCTTATGCTGGAGAACATTGACAGAAGGAAAAATGAAATTGTCCCTATTGATTCTAACCTTGATGCAGAG
ATACTTCAGGACCATCAAAACAGCTTATGCAAATAAAGCATGAGCTGTTGGAATCCCAACTCAGAGTAGCCTCT
TTGCAAGACATGTCTTGCCAACTACTGGTGAATGCTGAAGGAACAGACTGTTTAGAAGCCAAAAGAAAAAGTCCAT
GTTATTGGAATCGGCTCAAACCTTCTCTTGAAGGAGGTGAGTCTCATATCAAGGAACTGGAGAAGTTATTAGAC
GTGTCAAGTAGTCAGCAGGATTTGTCTTCTGGTCTTCTGCTGATGAACTGGACACCTCAGGGTCTGTGAGTCCC
ACATCAGGAAGGAGCACCCCAAACAGACAGAAAACGCCACGAGGCAAGTGTAGTCTCTCACAGCCTGGACCCCTCT
GTCAGCAGTCCACATAGCAGGTCCACAAAAGGTGGCTCCGATTCTCTCCCTTTCTGAGCCAGGGCCAGGTCCGTCC
GGCCGCGGCTTCTGTTCAGAGTCTCCGAGCAGCTCTTCCCTTCAGCTTCTCCTGCTCCTCTCATCGGGCTT
GCCTGCCTTGTACCAATGTGAGAGGAAGACTACAGCTGTGCCCTCTCCAACAACCTTTGCCCGGTCAATCCACCCC
ATGCTCAGATACACGAATGGCCCTCCTCCACTCTGAACTAAGCAGATGCCATCTGCAGAAGTGCTGGTAGCATAA
GGAGGATCGGGTCATAAGCAATCCCAAACCTACCAACAAGAGGACCTTGATCTTGGCGAAAAGCCCTCGGTGTGGCA
GCTTTAGCCCTCCTCCAGATCACATGTGTGCAAATTATGGCTTCAGAGGTGGAAGATAAACAGTGACGGGGGAAC
AAACAGACAACAAGAAGTTTGGAAAGAAATCTGGTTTGAGACTCTGAACCTTAGCATAAGGAGATTGAGTAAGG
ACCTCCAAAGTTCCCCGGAATCATGAATTCTGGGCCCTTGCCCCATTCTGTGCACAGCCAAGGACTTCAGTAGAC
CATCTGGGCAGCTTTCCCATGGTGTGCTCCAACCATCAGATAAATGACCCTCCCAAGCACCATGTGAGTGTCTG
ACAATCTACCAACCAACCAGTGTGAAGAGATTTTGAACCTTGTAACATACAATTTTTAAGAGCTTATATGGCA
GCTTCTTTTTTACCTTGTTTTTCTTTGGGGCATGATGTTTTAACCTTTGCTTTAGAAGCACAAGCTGTAAATCTA
AAAGGCACTTTTTTTTTAGAGGTATAAAGAAAACTAGATGTAATAAATAAGATCATGGAAGGCTTTATGTGAAAA
AAGTTGAATGTTATAGT

WO 2004/030615

PCT/US2003/028547

2310/6881
FIGURE 2124A

GCAGAGTCTGAGTCCCACTCCGCACCCACCCCTCTGTCTGGTACAGCTTACCAAACCAAAGTGCCCAAAGCCGTG
ACATCCCGGGCCGGCGGCTCGCAGGCCCGCCCTCCGCACGTACAGGCCGCGGGGTGCAGTGCCCCCTAGGGGCC
CCTGGGACGAGGAGGAAGCGCCAGGTCTTCCCGCCGCCGCCGCCGCCGCCGCCGCTGCTCCCCTGGCACGCGC
CCCGCCGCCCTCGGCAGCCGCAGTCCGTGTCCCTGAGAACCAGCCGTCCCGCGCCATGGGCACGCGTCTGCCG
CTCGTCTGCGCCAGTCCGCCGCCGCCGCCAGCCCCCGGGCCCTCCCGCGCCGCTCCGTGTGCCCTGTGCGCT
AGCAGCGGGCGGCGGAGGCGGCGGCGGTGGCCGGGAGGGCCTGCTTGGACAGCGGGCGCGCAGGATGGCCAG
GCCCCGAGCAGCTGCAGCCCCGGCGGCCGAACGCCCGCGGCGCGGGACTCCATCGTCAAGAAAGTCAATTCAGAA
TCAAAAGAAGTTCTAAGTTTATTGCAAGAAAAAACCTGCCCTCAAGCCGGTTCTTGCAATTATCCAGGCAGGT
GACGACAACCTTGATGCAGGAAATCAACCAGAAATTTGGCTGAGGAGGCTGGTCTGAACATCACTCACATTTGCCTC
CCTCCAGATAGCAGTGAAGCCGAGATTATAGATGAAATCTTAAAGATCAATGAAGATACCAGAGTACATGGCCTT
GCCCTTCAGATCTCTGAGAACTTGTTTAGCAACAAGTCTCAATGCCCTTGAACCAGAAAAAGATGTGGATGGA
GTAACAGACATAAACCTGGGGAAGCTGGTGCGAGGGGATGCCCATGAATGTTTGTTCACCTGTTGCCAAAGCT
GTAATTGAACCTTCTGAAAAATCAGTAGGTGTCAACCTAGATGGAAAGAGATTTTGGTAGTGGGGGCCATGGG
TCTTTGGAAGCTGCTCTACAATGCCCTGTTCCAGAGAAAAGGTCCATGACAATGAGCATCCAGTGGAAAAACACGC
CAGCTTCAAAGCAAGCTTACGAGGCTGACATTGTGGTCTAGGCTCACCTAAGCCAGAAGAGATTTCCCTTACT
TGGATACAACCAGGAACCTACTGTTCTCAACTGCTCCCATGACTTCTGTGAGGGAAGGTGGGTGTGGCTCTCCA
AGAATACATTTTGGTGGACTCATTGAGGAAGATGATGTGATTCTCTTGTGTCAGCTCTGCGAATTCAGAACATG
GTCAGTAGTGAAGGAGATGGCTTCTGTGAACAGCAGCACAGGCGGTGGAGACTTCACTGCTTGAAACTTCAGCCT
CTCTCCCCTGTGCCAAGTGACATTGAGATTTCAAGAGGACAACTCCAAAAGCTGTGGATGTCTTGCCATGAAAG
ATTGGATTGCTTGAGATGAAATTGAAATCTATGGCAAAGCAAAGCCAAAGTACGTTTGTCCGTGCTAGAAAGG
TTAAAGGATCAAGCAGATGGAAAATACGTCTTAGTTGCTGGGATCACACCCACCCCTCTTGAGAAGGGAAGAGC
ACAGTCACCATCGGGCTTGTGAGGCTCTGACCGCACACCTGAATGTCAACTCCTTGCCTGCTTGAGGCAGCCT
TCCCAAGGACCGACGTTTGGAGTGAAAGGAGGAGCCGCGGTGGTGATATGCCAGGTATCCCCATGGAGGAG
TTCAACCTTCACTTGACTGGAGACATCCACGCCATCACCGCTGCCAATAACTTGCTGGCTGCCGCCATCGACACG
AGGATTCTTCATGAAAACACGCAAACAGATAAGGCTCTGTATAATCGGCTGGTTCCCTTAGTGAATGGTGTGAGA
GAATTTTCAGAAATTCAGCTTGTCTGGCTAAAAAACTGGGAATAAATAAGACTGATCCGAGCACACTGACAGAA
GAGGAAGTGAGTAAATTTGCCGCTCTGACATCGACCCATCTACCATCACGTGGCAGAGAGTATTGGATACAAAT
GACCGATTTCTACGAAAAATAACCATCGGGCAGGGAACACAGAGAAGGGCCATTACCGGCAGGCGCAGTTTGAC
ATCGCAGTGGCCAGCAGATCATGGCGGTGCTGGCCCTGACGGACAGCCTCGCAGACATGAAGGCACGGCTGGGA
AGGATGGTGGTGGCCAGTGACAAAAGCGGGCAGCCTGTGACAGCAGATGATTGGGGGTGACAGGTGCTTTGACA
GTTTTGATGAAAGATGCAATAAAACCAACCTGATGCAGACCCTGGAAGGGACACCTGTGTTCTGTCATGCGGGC
CCTTTTGCTAACATTGCTCAGGCAACTCTTCAGTGTGGCTGATAAAATTGCCCTGAACTGGTTGGTGAAGAA
GGATTTGTAGTGACCGAAGCTGGCTTTGGTGTGACATCGGAATGGAGAAATCTTCAACATCAAGTGCCGAGCT
TCCGGCTTGGTGCCCAACGTGGTTGTGTTAGTGGCAACGGTGCAGCTCTGAAGATGCATGGAGGCGGGCCAAGT
GTAACGGCTGGTGTCTCTTAAGAAAGAATATACAGAGGAGAATCCAGCTGGTGGCAGACGGCTGCTGTAAC
CTCAGAAGCAAATTCAGATCACTCAGCTCTTTGGGGTTCCCGTTGTGGTGGCTCTGAATGTCTTCAAGACCGAC
ACCCGCGCTGAGATTGACTTGGTGTGTGAGCTTGCAAAGCGGGCTGGTGCCTTTGATGCAGTCCCCTGCTATCAC
TGGTCCGTTGGTGGAAAAGGATCGGTGGACTTGGCTCGGGCTGTGAGAGAGGCTGCGAGTAAAAAGAGCCGATT
CAGTTCTGTATGATGTTTCAAGTTCCAATTGTGGACAAGATAAGGACCATTGCTCAGGCTGTCTATGGAGCCAAA
GATATTGAACTCTCTCTGAGGCACAAGCCAAAATAGATCGTTACACTCAACAGGGTTTTGGAAATTTGCCCATC
TGCATGGCAAAGACCCACCTTTCTCTATCTACCAACCTGACAAAAAGGTGTGCCAAGGGACTTCATCTTACCT
ATCAGTGACGTCCGGCCAGCATAGGCGCTGGGTTCATTTACCCTTTGGTCCGAACGATGAGCACCATGCCAGGA
CTGCCCCACCGCCCTGCTTTTATGACATAGATCTTGATACCGAAACAGAACAAGTTAAAGGCTTGTCTAAGTG
GACAAGGCTCTCAGAGACCCGATGCAGACTCTGAAACAGACTACTCTTTGCCTTTTTGTGTCAGTTGGAGAAG
AAACTGAATTTGAAAAATGTCTGTTATGCAATGCTGGAGACATGGTGAATAGGCCAAAGATTTCTTCTCGTTC
AAGATGAATTTGTTACAGTGGAGTATGGTGTTCGGCAAAGGACCTCCACCAAGACTGAAAGAACTAATTTA
TTTCTGTTTCTGTGGAGTTTCCATTATTTCTACTGCTTACACTTTAGAATGTTTATTTTATGGGGACTAAGGGAT
TAGGAGTGTGAACTAAAAGGTAACATTTTCCACTCTCAAGTTTTCTACTTTGTCTTTGAACTGAAAATAACATG

WO 2004/030615

PCT/US2003/028547

2311/6881
FIGURE 2124B

GATCTAGAAAACC

WO 2004/030615

PCT/US2003/028547

2312/6881
FIGURE 2125

MVSSGRRWLREQQHRRWRLHCLKLQPLSPVPSDIEISRGQTPKAVDVLAKEIGLLADEIEIYGKSKAKVRLSVLE
RLKDQADGKYVLVAGITPTPLGEGKSTVTIGLVQALTAHLNVNSFACLRQPSQGPTFGVKGGAAGGGYAQVIPME
EFNLHLTGDIAITAANNLLAAIDTRILHENTQTDKALYNRLVPLVNGVREFSEIQLARLKIIRNWE

WO 2004/030615

PCT/US2003/028547

2313/6881
FIGURE 2126

ACTCTTGGGAAAAGTCTGCTGGGCACCGTCGTCGCGCTGAAGGTGGTTCTGTACCTGCTCCGAGTGTGCTTAGCGAT
GGCCTGGAAATCCGGCGGCGCCAGCCACTCGGAGCTAATCCACAATCTCCGCAAAAATGGAATCATCAAGACAGA
TAAAGTATTTGAAGTGATGCTGGCTACAGACCGCTCCCCTATGCAAAATGTAACCCATACATGGATTCTCCACA
ATCAATAGGTTTTCCAAGCAACAATCAGTGCTCCACACATGCATGCATATGCGCTAGAACTTCTATTTGATCAGTT
GCATGAAGGAGCTAAAGCTCTTGATGTAGGATCTGGAAGTGGAATCCTTACTGCATGTTTTGCACGTATGGTTGG
ATGTACTGGAAAAGTCATAGGAATTGATCACATTAAAGAGCTAGTAGATGACTCAGTAAATAATGTCAGGAAGGA
CGATCCAACACTTCTGTCTTCAGGGAGAGTACAGCTTGTTGTGGGGGATGGAAGAATGGGATATGCTGAAGAAGC
CCCTTATGATGCCATTTCATGTGGGAGCTGCAGCCCCCTGTTGTACCCAGGCGCTAATAGATCAGTTAAAGCCCGG
AGGAAGATTGATATTGCCTGTGGTCTGCAGGCGGAAACCAAATGTTGGAGCAGTATGACAAGCTACAAGATGG
CAGCATCAAAATGAAGCCTCTGATGGGGGTGATATACGTGCCTTTAACAGATAAAGAAAAGCAGTGGTCCAGGTG
GAAGTGAATTTTATCTTCTGCTCTTTCTTCTTCCACACATGCAAGGGATGAATTGTAAAAGCAACATCAGCTTGAC
CAGTATAAAATTACAGTGGATTGCTCATCTCAGTCCTCAAAGCTTTTTGAAAACCAACACCATCACAGCTTGTTT
TGGACTTTGTACACTGTTATTTTTCAGCATGAAAATGTGTGTTTTTTTAGGGTTTCTGATTCTTCAAAGAGGCAC
AGAGCCAAATTGGTAGAGGAAGGATGCAAAGTATAAATTTGTGTAATATTACTTTAACATGCCCATATTTTACTT
GGAAATATTAAAAGAAAGGGTTCTGTAAATGGAAAACCTAGTTTGTGAATTGATTTTGAGGAGTGGTTTTTCTT
TTCTTGGACACTTAATTCTGTTCTGATATTAATTTATCAGATTGCTTTTGTGCATTGGATAACACCACCATTCAC
AAGTTAAGATTCTTGGTATTTGGATATCTGTTAGATGCTACTAAGAAAATAGAGATGAGCTTTCTTTTAAAGCT
TTTGATGTGGTGTCATAGAATAGCATGTTGTAGATACAATCAGCTGCTTTGTTACCTTAAACTAGGCATTGTGA
AATATTAAACCTTAAGATGGCAGGTGATGTCTGTAAACACTCAGCTGTTTCAAGATTGGACATAACTGACTTAGTT
CTTCCCTTCTCTCTCTCTCAAAATTATAGGAGACTTGTAGTTTAGTGTGGTTTTCTGTTTCTAATTTGCTGCTGA
TAATGTATATGAACCTAACATGCTGTGTAAGCTGTGTCTAGTTCTTGAACAGTTTATGCAGTGCTGCTTTGCCA
AATAAAGTTAAAAGTAAAAGAGGC

WO 2004/030615

PCT/US2003/028547

2314/6881
FIGURE 2127

MAWKSGGASHSELIHNLRKNGI IKTDKVFEVMLATDRSHYAKCNPYMDSPQSIGFQATISAPMHAYALELLFDQ
LHEGAKALDVGSGSGILTACFARMVGCTGKVIDHIKELVDDSVNNVRKDDPTLLSSGRVQLVVG DGRMGY AEE
APYDAIHVGAAAPVVPQALIDQLKPGGRLILPVGPAGGNQMLEQYDKLQDGS IKMKPLMGVIYVPLTDKEKQWSR
WK

WO 2004/030615

PCT/US2003/028547

2315/6881
FIGURE 2128A

ACTCTGGCAAGTTGCGGGCGCGCGGGGAGCTGTGCGGGGACGCGGCCCTCGGGAGGACGTGGCCCCGGCCCCG
CCCCAGTGGGCCCCGACCCTCATGGCCCTGAGCAAAGGGCTGCGGGCTGCTGGGGCGCCTGGGGGCGGAGGGGGAC
TGTAGCGTGCTGCTGGAGGCGCGCGGCCGCGACGACTGCCTGCTGTTTCGAGGCCGGCACGGTGGCCACGCTGGCT
CCAGAAGAAAAGGAAGTCATTAAAGGACAGTATGGCAAGCTCACGGACGCGTACGGCTGCCTGGGGGAGCTGAGG
CTGAAATCTGGTGGCACGTCTCTGAGCTTCTTGGTGTGGTGACAGGCTGCACATCTGTGGGCAGAATTCAGAT
GCTGAAATCTACAAAATCACTGCCACTGACTTTTACCCTCTTCAGGAAGAGGCCAAGGAGGAGGAACGCCTCATA
GCTTTGAAGAAAATCCTCAGCTCGGGGGTGTCTATTCTCATGGCCAAACGATGGGTCTCGCTTTGACCTGACT
GTCCGCACGCAGAAGCAGGGGGATGACAGCTCTGAATGGGGGAACCTCTTCTTCTGGAACCAGCTGTTGCACGTG
CCCTTGAGGCAGCACCAGGTGAGCTGCTGTGACTGGCTGCTGAAGATCATCTGCGGGGTGGTCACCATCCGCACC
GTGTATGCCTCCCACAAGCAGGCCAAGGCCTGCCTCGTCTCTCGCGTTAGCTGTGAGCGCACAGGCACTCGCTTC
CACACCCGTGGCGTGAACGACGACGGCCATGTGTCCAACCTTCGTGGAGACAGAGCAGATGATTTACATGGACGAT
GGAGTGTCTATCTTTTGTCCAGATCAGAGGCTCCGTTCCGCTGTTCTGGGAACAGCCAGGGCTTCAGGTTGGCTCC
CATCATCTGAGACTCCACAGAGGCCTGGAAGCCAATGCCCTGCTTTCGACAGGCACATGGTGCTTCTGAAGGAG
CAGTACGGGCAGCAGGTGGTCTGTAACCTTCTGGGAAGCAGAGGCGGAGAGGAGGTGCTCAACAGAGCCTTCAAG
AAGCTGCTCTGGGCTTCTTGCCACGCGGGCGACACGCCTATGATCAATTTTACTTCCATCAGTTTGCCAAAGGT
GGGAAGCTAGAGAAATTGGAGACCCTCTTGAGGCCACAGTTAAAGCTGCACTGGGAAGACTTCGATGTGTTTACA
AAGGGGGAGAACGTCAGTCCACGTTTTCAGAAAGGCACCTTTCGGGATGAAGTGTCTTGACTGCCTGGACCGAACC
AACACTGTGCAGAGCTTCATCGCGCTCGAGGTCTGCTGCTGACAGTCAAGACCCTGGGGCTGAGTTCAAAACCC
ATCGTTGACCGCTTTGTGGAGTCTTCAAAGCCATGTGGTCTCTGAATGGCCACAGCCTGAGCAAGGTGTTCACA
GGCAGCAGAGCCCTGGAAGGGAAGGCCAAGGTGGGGAAGCTGAAGGATGGAGCCCGGTCCATGTCTCGAACCATC
CAGTCCAACCTTCTTCGACGGGGTGAAGCAGGAGGCCATCAAGCTGCTGCTGGTTGGGGACGTCTACGGCGAGGAG
GTGGCAGACAAAGGGGGCATGCTGCTGGACAGCAGGCGCTCCTGGTGACTCCAGGATCCTGAAAGCTATGACT
GAGCGTCAGTCCGAATTCACAAATTTCAAGCGGATCCGGATTGCTATGGGGACCTGGAACGTGAACGAGGAAAG
CAGTTCGGGAGCAACGTGCTCAGGACGGCGGAGCTGACAGACTGGCTGCTCGACTCGCCCCAGCTCTCGGGAGCT
ACCGACTCCAGGATGACAGCAGCCAGCTGACATATTGCTGTGGGGTTGAAGAGATGGTGGAAATTGAGCGCA
GGGAATATTGTCAATGCCAGTACTACCAACAAGAAGATGTGGGGTGAACAGCTTCAGAAAGCCATCTCACGCTCT
CATAGATACATTCTGTTGACTTCGGCACAGCTGGTGGGCGTCTGTCTTTATATCTTTGTACGTCCATACCATGTC
CCGTTTCATCAGGGACGTAGCCATCGACACAGTGAAGACGGGCATGGGGGGCAAGGCGGGGAACAAGGGCGCCGTC
GGCATCCGCTTCCAGTTCCACAGCACCAGCTTCTGCTTCATATGTAGTACCTGACGGCCGGGCAGTCCCAGGTG
AAGGAGCGGAATGAAGACTACAAGGAGATCACCAGAACTCTGCTTCCCAATGGGGAGAAATGTTTTTCTCAT
GATTATGTATTTTGGTGTGGCGATTTCAACTACCGCATTGATCTTACTTATGAAGAAAGTCTTCTATTTTGTAA
CGCCAAGACTGGAAGAACTTCTGGAATTTGATCAACTACAGCTACAGAAATCAAGTGGAAAAATTTTAAAGGAC
TTTCACGAAGGAGCCATTAACCTTTGGACCCACCTACAAGTATGACGTGGCTCAGCCGCTACGATACAAGCGAC
AAATGCCGCACCCCCGCTGGACAGACAGGTGCTGTGGTGGAGGAAGAAACATCCCTTTGATAAAACAGCTGGA
GAACTCAACCTTCTAGACAGTGATCTAGATGTTGACACCAAAGTCAGACACACCTGGTCTCCTGGTGCCCTGCAG
TATTATGGTCTGTCGGAGCTACAAGCGTCTGATCACAGACCTGTGCTGGCGATCGTGGAGGTGGAAGTTCAGGAA
GTCGATGTGGGTGCTCGGGAGAGGGTTTTCCAGGAAGTGTCTCCTTCCAGGGCCCCCTGGATGCCACTGTTGTA
GTAAACCTTCAATCACCGACCTTAGAAGAGAAAAACGAGTTTCCAGAGGACCTGCGTACTGAGCTCATGCAGACC
TTGGGGAGTTATGGGACAATTGTTCTTGTGTCAGGATCAACCAAGGGCAGATGCTGGTAACCTTTTGACAGAGTCAC
TCGGCTCTCAGTGTCTGGACGTGGACGGTATGAAGGTGAAAGGCAGAGCAGTGAAGATTAGACCGAAGACCAAG
GACTGGCTGAAAGGTTTTCGAGAGGAGATCATTCGGAACGAGACAGCATGGCCCCCGTGTCTCCCACTGCCAAC
TCCTGTTTGTCTGGAGGAACTTTGACTTCACAAGTTTGGACTATGAGTCAGAAGGGGATATTCTTGAAGACGAT
GAAGACTACTTGGTGGATGAATTCATCAGCCTGGAGTCTCGGACAGTGAAGTTCGGGGGAGACGACCTCTCTGAT
GTCCCCGGCCCCACAGCACTGGCTCCTCCAGCAAGTCACCTGCTCTACCAAAAAGAAGCAGCATCCAACGTAC
AAAGATGACGCGGACCTGGTGGAGCTCAAGCGGGAGCTGGAAGCCGTGCGGGAGTTCGCCACCGTTCTCCGAGC
AGGTCTCTGTGCTGCCCAACCGGCCCTCGGCCACCTCAACCCCCGAGAGACCCCCCTCCAACCGGTTTTAATG
GTGAAAAAGTCGGCTTCAGATGCGTCCATCTCCTCCGGCACCCATGGACAGTATTCAATTTTGCAGACGGCAAGA
CTTCTACCAGGAGCACCTCAGCAACCTCCCAAGGCTCGGACTGGAATAAGTAAACCTTATAATGTCAAGCAGATC

WO 2004/030615

PCT/US2003/028547

2316/6881
FIGURE 2128B

AAAACCAACCAATGCCAGGAGGCAGAAAGCAGCAATCCGGTGTCTCCTGGAAGCCAGAGGAGGTGCCTCCGAAGAA
GCCCTAAGTGCCGTGGCCCCAAGGGACCTTGAAGCATCCTCTGAACCAGAGCCCACACCGGGGGCAGCCAAACCA
GAGACCCACAGGCGCCCCACTCCTTCCCCGTGCGCCCCCAGGAGTTCCTGCCATCAAGAAGCCAACCTTG
AGAAGGACAGGAAAGCCCCTGTACCGGAAGAAGAGTTTGTAGCAACAGACTGTCCATTTTACAATCGGGCCCCCG
GAGACAAGCGTTGAGGCCCCCTCTGTGCTGACAGCCCCCTCGAGTCCCTCCTGTTCCTCAAACCAAGAACATTTTACG
CCTGGGAAAGCTGCAGAGAGGCCAAGCCACAGGAAGCCAGCATCAGACGAAGCCCCCTCCTGGGGCAGGAGCCTCT
GTGCCACCACCTCTGGAGGCGCCGCCTCTTGTGCCAAGGTACCCCCGAGGAGGAAGAAGTCAGCCCCCGCAGCC
TTCCACCTGCAGGTCTCTGCAGAGCAACAGCCAGCTTCTCCAGGGCCTCAGTTACAATAGCAGTGACAGCCCCCTCT
GGGCACCCACCTGCCGCGGGCACCCTCTTCCACAAGGGGACTTTCTCAGCACTTCATCTGCTACAAGCCCCGAC
AGCGATGGCACCAAGCGATGAAGCCAGAGGCAGCCCCACTTCTTGGTGATTATCAGGACCCCTTCTGGAACCTT
CTTACCACCCCTAAACTGTTGAATAACACTTGGCTTTCTAAGAGCTCAGACCCCTTGGACTCAGGAACCAGGAGC
CCCCAAAGAGATCCCATAGACCCAGTGTGAGCTGGCGCTTCAGCTGCCAAGGCAGAGCTGCCACCAGATCATGAA
CACAAAACCTTAGGTCACTGGGTGACAATCAGTGACCAAGAAAAGAGGACAGCACTGCAGGTGTTTGACCCACTG
GCAAAAACATGACTGAGCAGCTTTGAAGGCTGCAGTCTTATAGAATGCATACCTTCCTCCCTCTAGACATCCCTC
CACCAGAAGAGACATCTATTTAAAGGCACACTGGCCAAAACGTTTGTGCATCTGTCACTCTCGTGTAGTTTACAA
AAATCGTGTCTCTTATTACAGTAAGATGGTTACTCAGCCACCAAAATATATTTCACTCAAGGCTTGATCATCTGAA
GTTTGTCTCTTCAAGGAATGGGAACCTTCCTGTTAAATTCGGTGTATGGATTTTAAAGAAAGGAATCTAGCCAAATGA
GGTCCAAGAAGTTCTCACCCATTGAATTTTAAATGGCTGTTCAAGTTCATGTTGTACGTGATGGAGATTTGTCTT
TTGTTTTATTTGCATTTTACAGATTTGGTATAACATTTTGGGGAGCCACCTGAAGGTTGATGTATAAAGTAAGGA
TTAGAGAAGAGGTCGTTGTGACCATTAGTAGCTGTCTGGCCCACTTAACAAGGTTACAAAAATCAGAGTCG
GAGCAGCCAAATAGGTCAACCTAATGACTAGACTGTACATTCCCATGAGCCTTCATGTTAAGTGTGTACATGT
GCGTTAACCTTGATGATGCGTGAATCCCGAGGGAGCCGGTGGCATAACCCGTTAGCTTAACCTTAGCTTAAACTA
GCTGAAGGCTCCTGTGCCATGTCTTAGACATTGCATGCCCTATCAATTACTATAATCCTGAGCCATGGTGTGCTA
CTGAAACCAATTTTATCCACCATCTAGTCTTATTAAATGAAACCTCACGGATCCTTTGTTCCGCTTATATTTCC
ATGCATACCACATAAAAGCACACAGTGCGAAAACCTCTGTGATACGCGATATTGATTCTCATTTGTTAGAATATG
GAGAGTGTTCAGCCTCGTCTGTCCGGCTGGAGCTTCGGGATGGAAAGTGCTATGTGTCCCTGCATATAAGAATC
ACCAGGCCAGTGTTTTCTGGGTTTGCTTGTCTATATGTTTGTCTATATTTTTCCTATACATTTTCCACGTTT
CCAACAGCACTTCTCACCTATTCAATAACTGAAAAGACATTACCATAGTGCTTTACATTTTAAAGTAATGTTA
CAAGGTCTGGAATCCATTTGGAGCAGATACCGTGTTTTCTGCTATTTAATAAGAAGTTCAGTAGTGAAATCTTACT
GTACCGCCTGTTGTATCTGGGAGCCTCGTACAGAGGCTCGCACAGCAGTGATCAAGTGTATCCCTTACGTGACT
GGGGGATGTCTGTCTTAAAGCTGACTGCTAGGATAGTAAGGATCATCTTGCTGGGCTATGCCACTGTCTTGT
ACCAATTAGACATCTGGAATTTTATAATTAGTTTTTCTTGTCACTGTCAAGATATATTGCAGATTACTTAAATAT
GGCCATCAAAACAAAAGTTACAACACGTATCTCTTTTCTGCTGAAAACTAATACTGGAAAAAGGATAAAAAA
AAGGAATCCGTGACCCACAGAGCTAGACAGATAAGATGCATAGTTGACCAGTCATAAAAGGCGGTGTTTAGGTGA
TCAGGATGCCGTTGGTGGCATTACGTGCTTTATATGATTTTTTACCTCTGTAAACAAACACAAGAAATAAACAGAA
TGGTCCTTAACAGAGTTTGGGGGAGAGAGCAAGATGGGTTCTTGGAGAAGCTGATTTGCCAAGATGCACATCGC
TATTAACAGCCAGAGTCATAAATGAAATGAAATTGAAGAATTCATTCAAATGCTCTTTTCCCTATAACCTCTTTT
CTCACCAAAAAGGAGATAAATTTGAAAACAGATAAATGTAAACACCAGTCAAAGAAGCAGGGGAAAAGTAAGCTC
CTCCAAAGTTGCTTGCAGTGCTGGAAATAGATCTCATTTTTTAGGTTTTCTCTTCTGCTCCAGATACCAAATAAATG
GGACAGAGAATAAAATTTTTGTTAAATATGTGCTCATCTCTAAGTAGCTCTTCAGAGTCTGACCGTAAGTAA
AACACACAGAATTGTGTTGACTGGGGGAGGTGAATCACAAAAAGTTACGAGGAGTTTAAAGAGTTAAATATTATT
TGATCGTGGCTGTCAAATTTAGTGAACAACATAGATTGGATTTGGAGTTGGTAGTAGGTATGGTTCTCATACCAG
AATTCTCTTAAAAAAGGACAAATTTGGAATTGCCTTATTTATTTTAAATCAATGCTTACTAGTTGGT
AGGATTCCCAGGTCAGCAGCAGGGTTGATTAAATAATCTTGACAATGAGCAGCTGCCATCTTGGGGGATTTTCAAT
CTGTGGTTTTTAAATGTTTCGTCTTTGATGCTACCATCCAGGGCTTCTTATTGTGACCTTGTAGCCTATTTTGT
TCCTGCTGTCTCTAACATGGTGCAGTTCACGCAGACTGGTTTAGGTACTTCACAACCTCACCATTGTCTCTCTGA
CCCCAAGCCTAGTCCCTTTTACATCACCATCTTCTCAGACTTCTTGCTTATTCTTAAATATGTTTTGGTTAATG
ATTGAATTAGGACATCAGCTTAAGCAATTCCTGTAACGGTTTAAAGTTGTTGAAGTTCAAGGCACATAATAAAT

WO 2004/030615

PCT/US2003/028547

2317/6881
FIGURE 2128C

TCTCCCTGATGTGTGTGTAAGTATAAACAAAGTAATGTATCAAAGCGTTCAC TTTATAATGAAGTCATTTCATTG
GGAAGGAAAGCTGCAAAGATTATTGGGGGACTAGTGATTAATAAAATCCTGTAATATTTTGAAGTGAAAATTTG
TACTGAAATTGTACATGATACCTATTAAATGTTTTTGTC TTTTTT

WO 2004/030615

PCT/US2003/028547

2318/6881
FIGURE 2129

MALSKGLRLLGRLGAEGDCSVLLEARGRDDCLLFEAGTVATLAPEEKEVIKQYGKLTDAYGCLGELRLKSGGTS
LSFLVLVTGCTSVGRIPDAEIIYKITATDFYPLQEEAKEEERLIALKKILSSGVFYFSWPNDGSRFDLTVRTQKQG
DDSSEWGNSSFFWNQQLLHVPLRQHQVSCCDWLLKIICGVVTIRTIVYASHKQAKACLVSRVSCERTGTRFHTRGVND
DGHVSNFVETEQMIYMDDGVSSFVQIRGSVPLFWEQPGLQVGSHELLRLHRLGLEANAPAFDRHMLLKEQYQGVV
VNLLGSRGGEEVLNRAFKKLLWASCHAGDTPMINFDFHQFAKGGKLEKLETLLRPQLKLHWEDFDVFTKGENVSP
RFQKGTLRMNCLDCLDRINTVQSFIALEVLHLQLKTLGLSSKPIVDRFVESFKAMWSLNGHSLSKVFTGSRLEG
KAKVGKLDGARSMSRTIQSNFFDGVKQEAIKLLLVGDVYGEVADKGGMLLDSTALLVTPRILKAMTERQSEFT
NFKRIRIAMGTWNVNGGKQFRSNVLRTAELTDWLLDSPQLSGATDSQDDSSPADIFAVGFEEMVELSAGNIVNAS
TTNKKMWGEQLQKAISRSHRYILLTSAQLVGVCLYIFVRPYHVPFIRDVAIDTVKTGMGGKAGNKGAVGIRFQFH
STSFCFICSHLITAGQSQVKERNEDYKEITQKLCFPMGRNVFSDYVFWCGDFNYRIDLTYYEEVFYFVKRQDWKKL
LEFDQLQLQKSSGKIFKDFHEGAINFGPTYKYDVGSAAYDTSKCRTPAWTDRVLWWRKKHFPDKTAGELNLLDS
DLDVDTKVRHTWSPGALQYYGRAELQASDHRPVLAIVEVEVQEVVDVGARERVFQEVSSFQGPLDATVVVNLSPT
LEEKNEFPEDLRTELMQTLGSYGTIVLVRINQGQMLVTFADSHSALSVLDVDGMKVKGRAVKIRPKTKDWLKGRL
EEIIRKRDSPMAPVSPTANSCLEENFDFTSLDYSESGDILEDDEDYLVDEFNQPGVSDSELGGDDLSDVPGPTAL
APPSKSPALTKKKQHPTYKDDADLVELKRELEAVGEFRHRSPSRSLSVPNRPRPPQPPQPPPTGLMVKKASD
ASISSGTHGQYSILQTARLLPGAPQQPPKARTGISKPYNVKQIKTTNAQEAEEAIRCLLEARGGASEEALSAVAP
RDLEASSEPEPTPGAAPETPQAPPLPRRPPPRVPAIKKPTLRRTGKPLSPREEQFEQQTVHFTIGPPETSVEAP
PVVTAPRVPPVPKPRTFQPGKAAERPSHRKPASDEAPPGAGASVPPPLEAPPLVPKVPFRRKKSAPAAFHLLQVLQ
SNSQLLQGLTYNSSDSPSGHPPAAGTVFPQGDFLSTSSATSPDSDGKAMKPEAAPLLGDYQDPFWNLLHHPKLL
NNTWLSKSSDPLDSGTRSPKRDPIPVSAAGASAAKAELEFPDHEHKTILGHWVTISDQEKRTALQVFDPLAKT

WO 2004/030615

PCT/US2003/028547

2319/6881
FIGURE 2130

AGGCAGGGCGGGCGGGCGCTCTAAGGGTTCTGCTCTGACTCCAGGTTGGGACAGCGTCTTCGCTGCTGCTGGATA
GTCGTGTTTTTCGGGGATCGAGGATACTCACCAGAAACCGAAAATGCCGAAACCAATCAATGTCCGAGTTACCACC
ATGGATGCAGAGCTGGAGTTTGCAATCCAGCCAAATACAACCTGGAAAACAGCTTTTTGATCAGGTGGTAAAGACT
ATCGGCCCTCCGGGAAGTGTGGTACTTTGGCCTCCACTATGTGGATAATAAAGGATTTCCCTACCTGGCTGAAGCTG
GATAAGAAGGTGTCTGCCCAGGAGGTGAGGAAGGAGAATCCCTCCAGTTCAAGTTCGGGGCCAAGTTCTACCCCT
GAAGATGTGGCTGAGGAGCTCATCCAGGACATCACCAGAACTTTTTCTTCTCCAAGTGAAGGAAGGAATCCTT
AGCGATGAGATCTACTGCCCCCTGAGACTGCCGTGCTCTTGGGGTCCCTACGCTGTGCAGGCCAAGTTTGGGGAC
TACAACAAAGAAGTGACAAGTCTGGGTACCTCAGCTCTGAGCGGCTGATCCCTCAAAGAGTGATGGACCAGCAC
AACTTACCAGGGACCAAGTGGGAGGACCGGATCCAGGTGTGGCATGCCGAACACCGTGGGATGCTCAAAGATAAT
GCTATGTTGGAATACCTGAAGATTGCTCAGGACCTGGAAATGTATGGAATCAACTATTTTCGAGATAAAAAACAAG
AAAGGAACAGACCTTTGGCTTGGAGTTGATGCCCTTGGACTGAATATTTATGAGAAAGATGATAAGTTAACCCCA
AAGATTGGCTTTCTTGGAGTGAAATCAGGAACATCTCTTCAATGACAAAAAGTTTGTCAATTAACCCATCGAC
AAGAAGGCACCTGACTTTGTGTTTTATGCCCCACGTCTGAGAATCAACAAGCGGATCCTGCAGCTCTGCATGGGC
AACCATGAGTTGTATATGCGCCGCAGGAAGCCTGACACCATCGAGGTGCAGCAGATGAAGGCCCAGGCCCGGGAG
GAGAAGCATCAGAAGCAGCTGGAGCGGCAACAGCTGGAAACAGAGAAGAAAAGGAGAGAAAACCGTGGAGAGAGAG
AAAGAGCAGATGATGCGCGAGAAGGAGGAGTTGATGCTGCGGCTGCAGGACTATGAGGAGAAGACAAAGAAGGCA
GAGAGAGAGCTCTCGGAGCAGATTAGAGGGCCCTGCAGCTGGAGGAGGAGAGGAAGCGGGCACAGGAGGAGGCC
GAGCGCCTAGAGGCTGACCGTATGGCTGCACTGCGGGCTAAGGAGGAGCTGGAGAGACAGGCGGTGGATCAGATA
AAGAGCCAGGAGCAGCTGGCTGCGGAGCTTGCAAGTACACTGCCAAGATTGCCCTCTCGAAGAGGCGCGGAGG
CGCAAGGAGGATGAAGTTGAAGAGTGGCAGCACAGGGCCAAAGAAGCCAGGATGACCTGGTGAAGACCAAGGAG
GAGCTGCACCTGGTGATGACAGCACCCCGCCCCACCACCCCGGTGTACGAGCCGGTGAGCTACCATGTCTCCAG
GAGAGCTTGCAAGATGAGGGCGCAGAGCCCACGGGCTACAGCGCGGAGCTGTCTAGTGAGGGCATCCGGGATGAC
CGCAATGAGGAGAAGCGCATCACTGAGGCAGAGAAGAAGCAGCGTGTGCAGCGGCAGCTGCTGACGCTGAGCAGC
GAGCTGTCCCAGGCCCCGAGATGAGAATAAGAGGACCCACAATGACATCATCCACAACGAGAACATGAGGCAAGGC
CGGGACAAGTACAAGCAGCTGCGGCAGATCCGGCAGGGCAACCAAGCAGCGCATCGACGAGTTTCGAGGCCCTG
TAACAGCCAGGCCAGGACCAAGGGCAGAGGGGTGCTCATAGCGGGCGTGCCAGCCCCGCCACGCTTGTGTCTTT
AGTGCTCCAAGTCTAGGAACTCCCTCAGATCCCAGTTCCTTTAGAAAGCAGTTACCCAACAGAAACATTCTGGGC
TGGGAACCAGGGAGGCGCCCTGGTTTGTGTTTTCCCAAGTTGTAATAGTGCCAAGCAGGCCTGATTCTCGCGATTAT
TCTCGAATCACCTCCTGTGTTGTGCTGGGAGCAGGACTGATTGAATTACGGAATAATGCCTGTAAAGTCTGAGTAA
GAACTTCAIGCTGGCCTGTGTGATACAAGAGTCAGCATCATTAAGGAAACGTGGCAGGACTTCCATCTGTGCC
ATACTTGTCTGTATTGAAATGAGCTCAAATTGATTTTTTAATTTCTATGAAGGATCCATCTTTGTATATTTAC
ATGCTTAGAGGGGTGAAAATTATTTTGAAATTGAGTCTGAAGCACTCTCGCACACACAGTGATTCCCTCCTCCC
GTCACCTCACGAGCTGGCAGAGAGCACAGTGATCACCAGCGTGAGTGGTGGAGGAGGACACTTGGATTTTTTTT
TTTGTTTTTTTTTTTTTTGTCTTAACAGTTTTTAGAATACATTGTACTTATACACCTTATTAATGATCAGCTATATA
CTATTTATATACAAGTGATAATACAGATTTGTAACATTAGTTTTAAAAAGGGAAAGTTTTGTCTGTATATTTTG
TTACCTTTTACAGAATAAAAGAATTACATATGAAAAACCTCTAAACCATGGCACTTGATGTGATGTGGCAGGAG
GGCAGTGGTGGAGCTGGACCTGCCTGCTGCAGTCACGTGTAAACAGGATTATTATTAGTGTTTTATGCATGTAAT
GGACTATGCACACTTTTTAATTTTGTGAGTTTACACATGCCACTATGAGCTTTCAGACTCCAGCTGTGAAGAGAC
TCTGTTTGTCTGTGTTTGTGTTTGTGAGTCTCTCTGCCATGGCCTTGGCAGGCTGCTGGAAGGCAGCTTGTG
GAGGCCGTGGTTCCGCCCCTCATTCCTTCTCGTGCACTGCTTTCTCCTTCACAGCTAAGATGCCATGTGCAGG
TGGATTCCATGCCGCAGACATGAAATAAAAGCTTTGCAAAGGCA

WO 2004/030615

PCT/US2003/028547

2320/6881
FIGURE 2131

ATCTTCCGGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCTGACATATGTTCTCTAGGCCT
TTTAGAAAACATGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTACCATGGCAAACTGGGAGTCTA
CGATGTTCCCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAA
TGTGCGTATTGAGCACATTACGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGCGTGAAGGAAAATGATCAGAA
AAAGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTTCAAGCTAAAGCGCCAGCCTGCTCCACCCAGAGAAACACACTT
TGTGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTATTAATTATGTCATAATAGGTGTTAAA
AAGAAAAATAAA

WO 2004/030615

PCT/US2003/028547

2321/6881
FIGURE 2132

GGCAGCGCAGGGCAGACGGCGGCAGGAGAAGCAAGATGAATGCAGGCTCAGATCCTGTGGTCATCGTCTCGGCGG
 CGCGGACCATCATAGGTTTCCTTCAATGGTGCCTTAGCTGCTGTTCCCTGTCCAGGACCTGGGCTCCACTGTCATCA
 AAGAAGTCTTGAAGAGGGCCACTGTGGCTCCGGAAGATGTGTCTGAGGTCATCTTTGGACATGTCTTGGCAGCAG
 GCTGTGGGCAGAATCCTGTAGACAAGCCAGTGTGGGTGCAGGAATCCCTACTCTGTTCCAGCATGGAGCTGCC
 AGATGATCTGTGGGTCAAGCCTAAAAGCTGTGTGCCTTGCAAGTCCAGTCAATAGGGATAGGAGACTCCAGCATTG
 TGGTTGCAGGAGGCATGGAAAATATGAGCAAGGCTCCTCACTTGGCTTACTTGAGAACAGGAGTAAAGATAGGTG
 AGATGCCACTGACTGACAGTATACTCTGTGATGGTCTTACAGATGCATTTTCACTGTCATATGGGTATTACAG
 CTGAAAATGTAGCCAAAAAATGGCAAGTGAGTAGAGAAGATCAGGACAAGGTTGCAGTTCGTGTCCAGAACAGGA
 CAGAGAATGCACAGAAAGCTGGCCATTTTGACAAAGAGATTGTACCAGTTTTGGTGTCAACTAGAAAAGGTCTTA
 TTGAAGTTAAACAGATGAGTTTTCTCGCCATGGGAGCAACATAGAAGCCATGTCCAAGCTAAAGCCTTACTTTC
 TTAAGTATGGAACGGGAACAGTCACCCAGCCAATGCTTCAGGAATAAATGATGGTGTGCTGCAGCTGTGCTTCTTA
 TGAAGAAGTCAGAAGCTGATAAACGTGGGCTTACACCTTTAGCACGGATAGTTTCTGGTCCCAAGTGGGTGTGG
 AGCCTTCCATTATGGGAATAGGACCAATCCAGCCATAAAGCAAGCTGTTACAAAAGCAGGTTGGTCACTGGAAG
 ATGTTGACATATTTGAAATCAATGAAGCCTTTGCAGCTGTCTCTGCTGCAATAGTTAAAGAACTTGGATTAAACC
 CAGAGAAGGTCAATATTGAAGGAGGGGCTATAGCCTTGGGCCACCTCTTGGAGCATCTGGCTGTGCAATTCTTG
 TGACCCTGTTACACACACTGGAGAGAATGGGCAGAAGTCGTGGTGTGTCAGCCCTGTGCATTGGGGGTGGGATGG
 GAATAGCAATGTGTGTTTCAAGAGAGATGAATGCTTAACTTTGAACAACCTCAATTTCTTTTAACTAATAAA
 GTACTAGGTTGCAATATGTGAAATCAGAGGACCAAAGTACAGATGGAAACCATTTCTTACATCACAAAAACCCAA
 GTTTACAGCTTGTACTTTTACTTTAATGTGTAATACTCAACTCAAGGTACAAGACAATTGCATTTAACATTGTTAT
 AAATAAAAGGAACATCAGATCAATCATT

WO 2004/030615

PCT/US2003/028547

2322/6881
FIGURE 2133

MNAGSDPVVIVSAARTIIIGSFNGALAAVPVQDLGSTVIKEVLKRATVAPEDVSEVIFGHVLAAGCGQNPVRQASV
GAGIPYSVPAWSCQMICGSGLKAVCLAVQSIGIGDSSIVVAGGMENMSKAPHLAYLRTGVKIGEMPLTDSILCDG
LTDAFHNCHMGITAENVAKKWQVSREDQDKVAVLSQNRTEAQAQAGHFDKEIVPVLVSTRKGLIEVKTDEFPRHG
SNIEAMSKLKPYFLTDGTGTVTPANASGINDGAAAVVLMKKSEADKRGLTPLARIVSWSQVGVEPSIMGIGPIPA
IKQAVTKAGWSLEDVDIFEINEAFAAVSAAIVKELGLNPEKVNIEGGAIALGHPLGASGCRILVTLLHTLERMGR
SRGVAALCIGGGMGIAMCVQRE

WO 2004/030615

PCT/US2003/028547

2323/6881
FIGURE 2134

ACGTGTATCGCTGCCGTCAAGATGGAGGGGCCCTTTGTCCGTGTTCCGGTGACCGCAGCACTGGGGAAACGATCCGC
TCCCAAACGTTATGGCTGCAGCTTCGATTGCCAATATTGTAAAAAGTTCTCTTGGTCCAGTTGGCTTGGATAAA
ATGTTGGTGGATGATATTGGTGATGTAACCATTACTAACGATGGTGCAACCATCCTGAAGTTACTGGAGGTAGAA
CATCCTGCAGCTAAAGTTCTTTGTGAGCTGGCTGATCTGCAAGACAAAGAAGTTGGAGATGGAACACTTTCAGTG
GTTATTATTGCAGCAGAACTCCTAAAAAATGCAGATGAATTAGTCAAACAGAAAATTTCATCCCACATCAGTTATT
AGTGGCTATCGACTTGCTTGCAAGGAAGCAGTGCGTTATATCAATGAAAACCTAATTGTTAACACAGATGAAC TG
GGAAGAGATTGCCGTGATTAATGCTGCTAAGACATCCATGTCTTCCAAAATCATTGGAATAAATGGTGATTTCTTT
GCTAACATGGTAGTAGATGCTGTACTTGCTATTAAATACACAGACATAAGAGGCCAGCCACGCTATCCAGTCAAC
TCTGTTAATATTTTGAAAGCCCATGGGAGAAAGTCAAATGGAGAGTATGCTCATCAGTGGCTATGCACTCAACTGT
GTGGTGGGATCCCAGGGCATGCCAAGAGAATCGTAAATGCAAAAATTGCTTGCCCTTGACTTCAGCCTGCAAAAA
ACAAAAATGAAGCTTGGTGACAGGTGGTCATTACAGACCTGAAAAACTGGACCAAATTAGACAGAGAGAATCA
GATATCACCAGGAGAGAATTCAGAAGATCCTGGCAACTGGTGCCAATGTTATTCTAACCCTGGTGGAATTGAT
GATATGTGCTGGAAGTATTTTGTGGAGGCTGGTGCTATGGCAGTTAGAAGAGTTTTTAAAAAGGGACCTTAAACGC
ATTGCCAAAGCTTCTGGAGCAACTATTCTGTCAACCCTGGCCAATTTGGAAGGTGAAGAACTTTTGAAGCTGCA
ATGTTGGGACAGGCAGAAGAAGTGGTACAGGAGAGAATTTGTGATGATGAGCTGATCTTAATCAAAAATACTAAG
GCTCGTACGTCTGCATCGATTATCTTACGTGGGGCAAATGATTTTCATGTGTGATGAGATGGAGCGCTCTTTACAT
GATGCACTTTGTGTAGTGAAGAGAGTTTTTGGAGTCAAAATCTGTGGTTCCCGGTGGGGGTGCTGTAGAAGCAGCC
CTTTCCATATACCTTGAAAACTATGCAACCAGCATGGGGTCTCGGGAACAGCTTGCGATTGCAGAGTTTGCAAGA
TCACTTCTTGTTATTCCCAATACACTAGCAGTTAATGCTGCCCAGGACTCCACAGATCTGGTTGCAAAATTAAGA
GCTTTTCATAATGAGGCCCAGGTTAACCAGAACGTAATAATCTAAAATGGATTGGTCTTGATTTGAGCAATGGT
AAACCTCGAGACAACAAACAAGCAGGGGTGTTTGAACCAACCATAGTTAAAGTTAAGAGTTTGAAATTTGCAACA
GAAGCTGCAATCACCATTCTTCGAATTGATGATCTTATTAAATTACATCCAGAAAGTAAAGATGATAAACATGGA
AGTTATGAAGATGCTGTTCACTCTGGAGCCCTTAATGATTGATCTGATGTTCTTTTATTTATAACAATGTTAAA
TGCAATTGTCTTGACCTTGAGTTGAGTATTACACATTAAAGTAAAGTACAAGCTGTAACTTGGGTTTTTGTGA
TGTAGGAAATGGTTTCCATCTGTACTTTGGTCCTCTGATTTACATATTGCAACCTAGTACTTTATTAGTTTAAA
AAGAAATTGAGGTGTTCAAAGTTTAAGCAATTCATTCTCTCTGAACACACATTGCTATTCCCATCCCACCCCA
ATGCACAGGGCTGCAACACCACGACTTCTGCCATTCTCTCCAGTGTGTGTAACAGGGTCACAAGAATTC

WO 2004/030615

PCT/US2003/028547

2324/6881
FIGURE 2135

TTTGCTTTTGGCTTATTTCCGTCCATTTCCCTCTCTGCGCGCGGACCTTCCTTTTCCAGATGGTGAGAGCCGCGGG
GACACCCGACGCCGGGGCAGGCTGATCCACGATCCTGGGTGTGCGTAACGCCGCCTGGGGCTCCGTGGGCGAGGG
ACGTGTGGGGACAGGTGCACCGGAACTGCCAGACTGGAGAGTTGAGGCATCGGAGGCGCGAGAACAGCACTACT
ACTGCGGCGAGACGAGCGCGGCGCATCCCAAAGCCCGCCAAATGCGCTCGTCCCTGGGAGGGGAGGGAGGCGCG
CCTGGAGCGGGACAGTCTTGGTCCGCGCCCTCTCCCGGGTCTGTGCCGGGACCCGGGACCCGGGAGCCGTGCG
AGGTCTCGGTCCAAGGGGCCCTTTTCTCGGAAGGGCGGCGGCCAAGAGCAGGGAAGGTGGATCTCAGGTAGCGA
GTCTGGGCTTCGGGGACGGCGGGGAGGGGAGCCGGACGGGAGGATGAGCTCCCTGGCACCAGAGAGCGCGGAAA
GAGCCTGCAGTACCGAGTGGACCACCTGCTGAGCGCCGTGGAGAATGAGCTGCAGGCGGGCAGCGAGAAGGGCGA
CCCCACAGAGCGCGAACTGCGCGTGGGCCCTGGAGGAGAGCGAGCTGTGGCTGCGCTTCAAGGAGCTCACCAATGA
GATGATCGTGACCAAGAACGGCAGGAGGATGTTTCCGGTGTGAAGGTGAACGTGTCTGGCCTGGACCCCAACGC
CATGTACTCCTTCCCTGCTGGACTTCGTGGCGGGGACAACCACCGCTGGAAGTACGTGAACGGGGAATGGGTGCC
GGGGGGCAAGCCGAGCCGCGAGGCGCCAGCTGCGTCTACATCCACCCGACTCGCCCAACTTCGGGGCCCACTG
GATGAAGGCTCCCGTCTCCTTCAGCAAAGTCAAGCTCACCAACAAGCTCAACGGAGGGGGCCAGATCATGCTGAA
CTCCTTGCCATAAGTATGAGCCTCGAATCCACATAGTGAGAGTTGGGGGTCCACAGCGCATGATCACCAGCCACTG
CTTCCCTGAGACCCAGTTCATAGCGGTGACTGCTTATCAGAACGAGGAGATCACAGCTCTTAAATTAAGTACAA
TCCATTTGCAAAGCTTTTCTTGATGCAAAGGAAAGAAGTGATCACAAAGAGATGATGGAGGAACCCGGAGACAG
CCAGCAACCTGGGTACTCCCAATGGGGGTGGCTTCTTCTGGAAACCAGCACCTGTGTCCACCTGCAAAATCCTCA
TCCTCAGTTTGGAGGTGCCCTCTCCCTCCCTCCACGCACAGCTGTGACAGGTACCCAACCCTGAGGAGCCACCG
GTCTCTACCCCTACCCAGCCCTATGCTCATCGGAACAATTCTCCAACCTATTCTGACAACTACCTGCATGTTT
ATCCATGCTGCAATCCCATGACAATTGGTCCAGCCTTGAATGCCGTGCCATCCAGCATGCTCCCCGTGAGCCA
CAATGCCAGCCACCTACCAGCTCCAGTACAGTACCCAGCCTGTGGTCTGTGAGCAACGGCGCCGTACCCCGGG
CTCCCAGGCAGCAGCCGTGTCCAACGGGCTGGGGGCCAGTCTTCCGGGGCTCCCCCGCGCACTACACACCCCT
CACCCATCCGGTCTCGGCGCCCTCTTCTCGGGATCCCACTGTACGAAGGGCGGCCGCGCCACAGACATCGT
GGACAGCCAGTACGACGCCGAGCCCAAGGCCGCTCATAGCCTCATGGACACCTGTGTGCGCCACCTTCCATGTG
AAGCAGCAAGGCCAGGTCCCGAAAGATGCAGTGACTTTTTGTGCTGGCAGCCAGTGGTGACTGGATTGACCTAC
TAGGTACCCAGTGGCAGTCTCAGGTAAAGAAGGAAATGCAGCCTCAGTAACCTTCTTTTCAAAGCAGTGGAGGAG
CACACGGCACCTTTCCCCAGAGCCCCAGCATCCCTTGCTCACACCTGCAGTAGCGGTGCTGTCCCAGGTGGCTTA
CAGATGAACCCAACTGTGGAGATGATGCAGTTGGCCCAACCTCACTGACGGTGAAAAATGTTTGCCAGGGTCCA
GAACTTTTTTTGGTTTTATTTCTCATACAGTGATTGGCAACTTTGGCACACCAGAATTTGTAACTCCACCAGT
CCTACTTTAGTGAGATAAAAAGCACACTCTTAATCTTCTTCTTCTTGTGCTTTCAAGTAGTTAGAGTTGAGCTGTT
AAGGACAGAATAAAATCATAGTTGAGGACAGCAGTTTTAGTTGAATTGAAAATTTGACTGCTCTGCCCCCTAGA
ATGTGTGATTTTAAAGCATATGTAGCTAATCTCTTGTGTTGTTAACTATAACTGTTTCATATTTTCTTTTGAC
AAAGTAGCCAAAGACAATCAGCAGAAAGCATTCTTGCAAAATAAACGCAATATGCAAAATGTGATTCGTCCAGT
TATTAGTGAAGCCCTCCTTTTGTGAGTATTTACTGTTTATTG

WO 2004/030615

PCT/US2003/028547

2325/6881
FIGURE 2136

MSSPGTESAGKSLQYRVDHLLSAVENELQAGSEKGDPTERELRVGLEESELWLRFKELTNEMIVTKNGRRMFVVL
KVNVSGLDPNAMYSFLLDFVAADNHRWKYVNGEWVPGGKPEPQAPSCVYIHPDSPNFGAHWMKAPVSFSKVKLTN
KLNGGGQIMLNSLHKYEPRIHIVRVGGPQRMITSHCFPETQFIAVTAYQNEEIITALKIKYNPFAKAFLDAKERSD
HKEMMEEPGDSQQPGYSQGWLLPGTSTLCPPANPHPQFGGALSIPSTHSCDRYPTLRSHRSPYPSPYAHNRNS
PTYSDNSPACLSMLQSHDNWSSLGMPAHPMSMLPVSHNASPPTSSSQYPSLWSVSNGAVTPGSQAAAVSNGLGAQF
FRGSPAHTPLTHPVSAPSSSGSPLYEGAAAATDIVDSQYDAAAQGRLIASWTPVSPPSM

WO 2004/030615

PCT/US2003/028547

2326/6881
FIGURE 2137

CGCAGCCGTGCGATGTTGTCTCTACAGCCATGTATTTCGGCTCCTGGCAGAGACTTGGGGATGGAACCGCACAGA
GCCGCGGGCCCTTTGCAGCTGCGATTTTCGCCCTACGTTTTCAACGGAGGTACTATACTGGCAATTGCTGGAGAA
GATTTTGCAATTGTTGCTTCTGATACTCGATTGAGTGAAGGGTTTTCAATTCATACGCGGGATAGCCCCAAATGT
TACAAATTAACAGACAAAACAGTCATTGGATGCAGCGGTTTTTCATGGAGACTGTCTTACGCTGACAAAGATTATT
GAAGCAAGACTAAAGATGTATAAGCATTCCAATAATAAGGCCATGACTACGGGGGCAATTGCTGCAATGCTGTCT
ACAATCCTGTATTCAAGGCGCTTCTTTCCATACTATGTTTACAACATCATCGGTGGACTTGATGAAGAAGGAAAG
GGGGCTGTATACAGCTTTGATCCAGTAGGGTCTTACCAGAGAGACTCCTTCAAGGCTGGAGGCTCAGCAAGTGCC
ATGCTACAGCCCCTGCTTGACAACCAGGTTGGTTTTAAGAACATGCAGAATGTGGAGCATGTTCCGCTGTCCTTG
GACAGAGCCATGCGGCTGGTGAAAGATGTCTTCATTTCTGCGGCTGAGAGAGATGTGTACACTGGGGACGCACTC
CGGATCTGCATAGTGACCAAAGAGGGCATCAGGGAGGAACTGTTTCCTTAAGGAAGGACTTGATCTGTGTGCTCT
TATCACCAATCAGTTCAGACCTGGTTGATTTTGTACTTTGGAAGTGTACCTTGGATGGTTTTGTTTATTAATA

WO 2004/030615

PCT/US2003/028547

2327/6881
FIGURE 2138

MLSSTAMYSAPGRDLGMEPHRAAGPLQLRFSPYVFNGGTILAIAGEDFAIVASDTRLSEGFSIHTRDSPKCYKLT
DKTVIGCSGFHGDCLTLTKIIEARLKMYKHSNNKAMTTGAIAAMLSTILYSRRFFPYVYNIIGGLDEEGKGAVY
SFDPVGSYQRDSFKAGGSASAMLQPLLDNQVGFKNMQNVEHVPLSLDRAMRLVKDVFISAAERDVYTGDALRICI
VTKEGIREETVSLRKD

WO 2004/030615

PCT/US2003/028547

2328/6881

FIGURE 2139

GCTCCCAGCCGGGCCCCCTCAGCGGTGCGCGGGACGGCTCCCGGCTGCAGTCTGCCCGCCCCGCCCGCGGGGGC
CGAGTCGCGAAGCGCGCCTGCGACCCGGCGTCCGGGCGCGCTGGAGAGGACGCGAGGAGCCATGAGGCGCCAGCC
TGCGAAGGTGGCGGCGCTGCTGCTCGGGCTGCTCTTGGAGTGCACAGAAGCCAAAAAGCATTGCTGGTATTTCTGA
AGGACTCTATCCAACCTATTATATATGCCGCTCCTACGAGGACTGCTGTGGCTCCAGGTGCTGTGTGCGGGGCCCT
CTCCATACAGTGGCTGTGGTACTTCTGGTTCTTCTGATGATGGGCGTGCTTTTCTGCTGCGGAGCCGGCTTCTT
CATCCGGAGGCGCATGTACCCCCCGCGCTGATCGAGGAGCCAGCCTTCAATGTGTCTACACCAGGCAGCCCCC
AAATCCCGGGCCAGGAGCCAGCAGCCGGGGCCACCCTATTACACCGACCCAGGAGGACCGGGGATGAACCCTGT
CGGGAATTCCATGGCAATGGCTTTCCAGGTCCCACCCAACTCAGCCAGGGGAGTGTGGCCTGCCCGCCCCCTCC
AGCCTACTGCAACACGCCTCCGCCCCCGTACGAACAGGTAGTGAAGGCCAAGTAGTGGGGTGCCACGTGCAAGA
GGAGAGACAGGAGAGGGGCCCTTTCCCTGGCCTTCTGCTTTCGTTGATGTTCACTTCCAGGAACGGTCTCGTGGGC
TGCTAAGGGCAGTTCCCTCTGATATCCTCACAGCAAGCACAGCTCTCTTTCAGGCTTTCATGGAGTACAATATAT
GAACTCACACTTTGTCTCCTCTGTTGCTTCTGTTCTGACGCAGTCTGTGCTCTCACATGGTAGTGTGGTGACAG
TCCCCGAGGGCTGACGTCTTACGGTGGCGTGACCAGATCTACAGGAGAGAGACTGAGAGGAAGAAGGCAGTGCT
GGAGGTGCAGGTGGCATGTAGAGGGGCCAGGCCGAGCATCCCAGGCAAGCATCCTTCTGCCCGGGTATTAATAGG
AAGCCCCACGCCGGGCGGCTCAGCCGATGAAGCAGCAGCCGACTGAGCTGAGCCAGCAGGTCTGCTCCAGC
CTGTCTCTCTGTCAGCCTTCTCTTCCAGAAGCTGTTGGAGAGACATTCAGGAGAGAGCAAGCCCCCTGTCTAGT
TTCTGTCTCTGTTTATATCCTAAAGATAGACTTCTCTGACCCGCCAGGGAAGGGTAGCACGTGCAGCTCTCACC
GCAGGATGGGGCCTAGAATCAGGCTTGCCCTTGGAGGCCCTGACAGTGATCTGACATCCACTAAGCAAATTTATTTA
AATTCATGGGAAATCACTTCTGCCCCAACTGAGACATTGCATTTTGTGAGCTCTGGTCTGATTGGAGAAAG
GACTGTTACCCATTTTTTGGTGTGTTTATGGAAGTGCATGTAGAGCATCTGCCCCTTGAAATCAGACTGGGTGT
GTGTCTTCCCTGGACATCACTGCCTCTCCAGGTCACTCTCAGGCCCGGGGTCTCCTTCCCTCAGGCAGCTCCAG
TGGTGGGTCTGAAGGGTGCTTTCAAACAGGGGGCACATCTGGCTGGGAAGTCACATCTTGGAGGAGGA
GAGACCAGCTGAGGCGTCTCTCTCTGAGGTTGTGTTGGGTCTAAGCGGTGTGTGCTGGGCTCCAAGGAGGAGGA
GCTTGCTGGGAAAAGACAGGAGAAGTACTGACTCAACTGCACTGACCATGTTGTCTATAATTAGAATAAAGAA
GTGGTTGGAAATGCACATTCTTGATAGGAATCACAGCTCAGCCAGGATCTCACAGGTAGTCTCCTGAGTAGTT
GACGGCTAGCGGGGAGCTAGTTCCGCCGCATAGTTATAGTGTGATGTGTGAACGCTGACCTGTCTGTGTGCTA
AGAGCTATGCAGCTTAGCTGAGGCGCCTAGATTACTAGATGTGCTGTATCACGGGGAATGAGGTGGGGGTGCTTA
TTTTTTAATGAACATAACAGAGACTCTTGAGAAATTGTTACTCATTGAAGTGGAGCATCAAGACATCTCATGGAA
ATGGATACGGAGTGATTTGGTGTCCATGCTTTTCACTCTGAGGACATTTAATCGGAGAACCTCTGGGGAATTTT
GTGGGAGACACTTGGGAACAAACAGACACCCTGGGAATGCAGTTGCAAGCACAGATGCTGCCACCAGTGTCTCT
GACCACCCTGGTGTGACTGCTGACTGCCAGCGTGGTACCTCCCATGCTGCAGGCCTCCATCTAAATGAGACAACA
AAGCACAATGTTCACTGTTTACAACCAAGACAACCTGCGTGGGTCCAAACACTCCTCTTCTCCAGGTCAATTTGTT
TTGCATTTTTTAATGTCTTTATTTTTTGTAAATGAAAAAGCACACTAAGCTGCCCTGGAATCGGGTGCAGCTGAAT
AGGCACCCAAAAGTCCGTGACTAAATTTCTGTTTGTCTTTTTGATAGCAAATAATGTTAAGAGACAGTGATGGCTA
GGGCTCAACAATTTTGTATTCCCATGTTTGTGTGAGACAGAGTTTGTTCCTTGAACCTGGTTAGAAATTGTGC
TACTGTGAACGCTGATCCTGCATATGGAAGTCCCACTTCCGTGACATTTCTGGCCATTCTTGTTCATTGTGT
GGATGGTGGGTGTGCCACTTCTGGAGTGAGACAGCTCCTGGTGTGTAGAATCCCGGAGCGTCTGTGGTTCA
GAGTAACTTGAAGCAGATCTCTGCATGCTTTTCTCTGCAACAATTGGCTCATTTCTTTTTTGTCTCTTTT
GATAGGATCCTGTTTCTATGTGTGCAAAATAAAAAATAAATTTGGGCAA

WO 2004/030615

PCT/US2003/028547

2329/6881
FIGURE 2140

ATGGCAGGGGAGTCACAAAGGAGAAGCACTCAGCCTGCCGAGAGGTCCCAGGACTTTCCTGGAGGATCAGTCCCC
AAACTGACTGTGACAGGGAGCTATACCCAGATAACAGCAGAGGCCCAGAATAAGAAAGAGTCTGTAGATGGCAAG
TCAATGGGAAATCATTCCAGGAAGGTAGGGAAAGATGGAATTCTGGAGAGCATTGGACCTCAGATTGGGAGTCTG
AACGTCTTTCCATATGCATCAGGAAGCCATGGAAAATTCACAGACTGGAGTGACTTTGGCAAAGGAACAACATAT
AACGCACTCTCCCCTGAACTCTACACAACATATTTGTACCAAGACCCTACTTCTGACCTCCCTGTTCTTATGC
ATTGGAACAGCATACCCCCGATTCCGCTACGACCAACTCATACACCTCCTATGA

WO 2004/030615

PCT/US2003/028547

2330/6881
FIGURE 2141

CTAAATACTACCGTATGACCCACCATAATTACCCCCATACTCCTTACACTATTCCCTCATCACCCAACTAAAAATA
TTAAATACAAATTACCACCTACCTCCCTCACCAAAGCCCATAAAAAATAAAAACTATAACAAACCCTGAGAACCA
AAATGAACGAAAATCTGTTCACTTCATTCAITGCCCCACAATCCTAGGCCTACCCGCCGCGAGTACTGATCATT
TATTTCCCCCTCTATTGATCCCCACCTCCAAATATCTCATCAACAACCGACTAATTACCACCCAACAATGACTAA
TCCAATAACCTCAAAACAAATGATAGCCATACACAACACTAAGGGACGAACCTGATCTCTTATACTAGTATCCT
TAATCATTTTTTATTGCCACAATAACCTCCTCGGACTCCTGCCTCACTCATTTACACCAACCACCCAACCTATCTA
TAAACCTAGCCATGGCCATCCCCCTTATGAGCGGGCGCAGTGATTATAGGCTTTTCGCTCTAAGATTAAAAATGCCC
TAGCCCACTTCTTACCACAAGGCACACCTACACCCCTTATCCCTATACTAGTTATTATCGAAACCATCAGCCTAC
TCATTCAACCAATAGCCCTGGCCGTACGCCTAACCGCTAACATTACTGCAGGCCACCTACTCATGCACCTAATTG
GAAGCGCCACACTAGCAATATCAACTATTAACCTTCCCTCTACACTTATCATCTTCACAATTCTAATTCTACTGA
CTATCCTAGAAATCGCTGTGCGCTTAATCCAAGCCTACGTTTTTACACTTCTAGTAAGCCTCTACCTGCACGACA
ACACATAATGACCCACCAATCACATGCCATATCATATAGTAAACCCAGCCCATGGCCCCCTAACAGGGGCCCTCTC
AGCCCTCCTAATGACCTCCGGCCTAGCCATGTGATTTCACTTCCACTCCACAACCCCTCCTCATACTAGGCCTACT
AACCAACACACTAACCATATACCAATGATGGCGCGATGTAACACGAGAAAGCACATACCAAGGCCACCACACACC
ACCTGTCCAGAAAGGCCTTCGATACGGGATAATCCTATTTATTACCTCAGAAGTTTTTTCTTCGCAGGATTTTT
CTGAGCCTTTTACCCTCCAGCCTAGCTCCACCCCCCACTAGGGGGACACTGGCCCCCAACAGGCATCACCCC
GCTAAATCCCCTAGAAGTCCCACTCCTAAACACATCCGTATTACTCGCATCAGGGGTATCAATCACCTGAGCTCA
CCATAGTCTAATAGTCTATTTTACCCTCCTACAAGCCTCAGAGTACTTCGAG

WO 2004/030615

PCT/US2003/028547

2331/6881
FIGURE 2142

GTGGGAACATCCAGTTGCGGGAAAACAAGCTTAACACGCCCCTGATTCTACATTATGCTCCTACCTCCCGGCAG
CCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCC
CATACCCTACGTACGGCAGCCTCCGCAGATGAGCCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCG
TTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCT
CACCAGGCCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCTCCAGGCCCA
GCCTCTGCCTCCCCTCAGCCTCTACAGTCCCAACGTCTGCCTCACAGCAGATTCTTCAGGCCCAGCATCTGCCTC
ACTTGGACCCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTTCGGCAGCCTCT
CCAGGCCCAGCTCCTCCTGCCTCCCAGTGGCCTCTTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCA
AGCCCCGCTTTTGACTTTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCAC
AGGCCAGCCTCTGCCTCACAGCGGACTCTC

WO 2004/030615

PCT/US2003/028547

2332/6881
FIGURE 2143

MLLPGSLSRPRTFSSQPLQTKLMTHNGLFRPIPYLTAVSADEPTASQQPPQQLHRYNGLFRPSSCLPAFSPGP
ELSQVDLTRPSSCFFAASPGPTPASWWPLQAQVPPVGLYNPNICLTADSSRPASASQWTLQTQMVSHCGILRRS
SCLSAASPGPAPPASQWPLSAQPSSCLPAAFPSPAFFFWWPLQASTRPSLLPPEGLHRPSLCLTADSPRPASSRL
TAASPVQSSCLSATSAGPATACQWPL

WO 2004/030615

PCT/US2003/028547

2333/6881
FIGURE 2144

CTCTCTCACACACACCCCCGCTTGGGCCTCCTCTCTCTCTCCGGCTCCATTTTCTCCGCCGCCGGGGGCCGGGGT
CTCCTGTGGGGGGCCAGCCGGTATCCCAGGTCTCCCTTCAGTGCCGGGGTGAACCCCCGGGGGAGCCGGGAGCC
GGGGGCAGACGGGCGGGGGTTGGGGCGGAGGGAGCAGCGGCCCCAGCGAGTTTGGGGGGAGAAGTAACCAGGCGG
GGGGAGGGGCGGAGCAGGGAGGGGGCCTCAGGGCCCCCCCCAGCTATGGACGAACGGCTACTGGGGCCGCCCCC
TCCAGGCGGGGGCCGGGGGGGCTGGGATTGGTGAGTGGGGAGCCTGGGGGCCCTGGCGAGCCTCCCGGTGGCGG
AGACCCCGGTGGGGGTAGCGGGGGGGTCCCGGGAGGCCGAGGGAAGCAAGACATCGGGGACATTCTGCAGCAGAT
AATGACCATCACCGACCAGAGCCTGGACGAGGCCAGGCCAAGAAACACGCCCTAAACTGCCACCGAATGAAGCC
TGCTCTCTTTAGCGTCCTGTGTGAAATCAAGGAGAAAAGTGGCCTCAGCATTCGGAGCTCCCAGGAGGAGGAGCC
GGTGGACCCACAGCTGATGCGCTTGGACAACATGCTTCTGGCAGAGGGTGTGGCTGGGGCCGAGAAAGGGGGCGG
CTCAGCAGCAGCAGCTGCAGCCGCTGCAGCCTCTGGTGGTGGTGTGTCCCTGACAACTCCATCGAACACTCGGA
CTATCGCAGCAAACCTTGCCAGATCCGTCACATATACCACTCGGAGCTGGAGAAGTATGAGCAGGCATGTAATGA
GTTACAGACCCATGTCATGAACCTGCTGAGGGAGCAGAGCCGCACCAGGCCCGTGGCCCCAAAGAGATGGAACG
CATGGTGAGCATCATCCATCGAAAGTTCAGCGCCATCCAGATGCAGCTGAAGCAGAGCACCTGCGAGGCTGTGAT
GATCCTGCGCTCCCGTTTCTGGATGCCAGACGAAAGCGCCGTAACCTCAGCAAACAGGCCACTGAGGTCTTAAA
TGAGTATTTCTACTCCCACCTGAGTAACCCATATCCTAGTGAGGAGGCCAAGGAGGAGCTTGCCAAGAAGTGTGG
CATCACCGTGTCTCAGGTCTCCAACCTGGTTTGGCAACAAGAGGATTGCTATAAGAAAAACATCGGAAAGTTCCA
AGAGGAGGCAAACATCTATGCTGTCAAGACCGCCGTGTGAGTCACCCAGGGGGGCCACAGCCGCACCAGCTCCCC
GACACCCCTTCTCTGCAGGTGGATCCCAGTGTACCCAGCTGACTGTTTTGCACACTTCTGCTTTTGTTC
CACTTCTATCTAGGCAGGATCATAGCAGAGAGGGGGCCTTTTGGGGTGAGAGGGACCGAGCTGAGATAGGCTGG
AGATGTCAGGGGACAGAGGCCATTCCAGTGATCTTAGTTCTGCCTTTCTTCCACGGGTGGCCAAGGAACAGCCT
GCTCTTTCTGTGTGTTGGAATGTTATTTTGTGGATAATTGGAGTATAGTAGCATGTCCCCAC

WO 2004/030615

PCT/US2003/028547

2334/6881
FIGURE 2145

GAGTAGAGTAGGGCAGGAGAACTGGGCCAGGCTGCACTTAGCTCAAGGGGCCTCGAGGACTCTCTGCGTCTCTG
GAGACAAGGGCACTACACGCACTTCAGAATGAAGAGTTGCGGGAGCATGCTGGGGCTCTGGGGGCAGCGGCTCCC
CGCGGCGTGGGTCTGCTTCTGTTGCCCTTTCCTGCCGCTGCTGCTGCTTGACGCCCCGCGCCCCACCGCGAGTC
CTACAAGCCGGTCATCGTGGTGACATGGGCTCTTCGACAGCTCGTACAGCTTCCGCCACCTGCTGGAATACATCAA
TGAGACACACCCCGGGACTGTGGTGACAGTGCTCGATCTCTTCGATGGGAGAGAGAGCTTGCGACCCCTGTGGGA
ACAGGTGCAAGGGTTCGAGAGGCTGTGGTCCCCATCATGGCAAAGGCCCTCAAGGGGTGCATCTCATCTGCTA
CTCGCAGGGGGGCCTTGTGTGCCGGGCTCTGCTTCTGTCATGGATGATCACAACGTGGATTCTTTTCATCTCCCT
CTCCTCTCCACAGATGGGACAGTATGGAGACACGGACTACTTGAAGTGGCTGTTCCCCACCTCCATGCGGTCTAA
CCTCTATCGGATCTGCTATAGCCCCCTGGGGCCAGGAATTCTCCATCTGCAACTACTGGCATGATCCCCACCACGA
TGACTTGTACCTCAATGCCAGCAGCTTCCTGGCCCTGATCAATGGGGAAAGAGACCATCCCAATGCCACAGTATG
GCGGAAGAAGCTTTCTGCGTGTGGGCCACCTGGTGCTGATTGGGGGCCCTGATGATGGTGTTATTACTCCCTGGCA
GTCCAGCTTCTTTGGTTTCTATGATGCAAATGAGACCGTCTTGAGATGGAGGAGCAACTGGTTTATCTGCGGGA
TTCTTTTGGGTTGAAGACTCTATTGGCCCCGGGGGCCATAGTGAGGTGTCCAATGGCCGGTATCTCCCACACAGC
CTGGCACTCCAACCGTACCCCTTTATGAGACCTGCATTGAACCTTGGCTCTCCTGAGGATATATTAGGGGTCCCC
AGGAACCTCTCGGTCCAGAGACCAAGTGGTGGCCTTGAAAGCAGATGTCAGGCTTGGTGTGCCTGTGACCACC
TCATTGCTCCCATATTATCCCCATTTTTAGTAGAGACGGGGTTTTAGTAGAGACTTGGCCTCCCAGAACCCCT
TCCTCTGCTCCTCCATGAATGACAATTCCAGGCCTCCCCACCTCATGTCCTCTCATTGGGGGATTGCTCCGTG
CTGTCCCTTTCTCTCAAGGCCGAAGTTGGGAAGTGAGAAACCATGTTTTTAACCTGTGGCTGCTTTTGCTGCTGC
TGCTCCTCCGTATCTGGCTGTATGGGTGGAGAACCACCCCTGCCACCACAGGGGTCTCCTTCCAGGCCACTC
AGGACATTTTTAGCTTCTCTCCTCCCCATGTTCCCTTTTTTCTCTAAAGTCCCTGACATCAGCCCTCCCAACTC
CTAAGAGGGACTACCCATGAGAGTGGGGTTCTGAGGCTCCCTATGGGGACAGTTCCGTTCTTGAAGTGTGAGT
TTGGGGAATATCTGTGGCCTATGAGGCCATCTCAGGTTTGGGGATCCCCAGTCCCTATGATCAGTGTGGAGT
ACCCCTTGGGAGAGCCTAGTTTCTTTGAGGCCCCAGGCCCTCTTTTAACCTTTGAATAGGTGTATCCCTG
TATTTATGGAATAAAGTTCCATTTCTC

WO 2004/030615

PCT/US2003/028547

2335/6881
FIGURE 2146A

AGAAGGTAGCAGACAGACAGACGGATCTAACCTCTCTTGGATCCTCCAGCCATGAGGCTGCTCTGGGGGCTGATC
TGGGCATCCAGCTTCTTCACCTTATCTCTGCAGAACCCAGGTTGCTCTTGTCTCTCCTTCTGTGGTTTCATCTG
GGGGTCCCCCTATCGGTGGGGGTGCAGCTCCAGGATGTGCCCCGAGGACAGGTAGTGAAAGGATCAGTGTTCCTG
AGAAACCCATCTCGTAATAATGTCCCTGCTCCCCAAAGGTGGACTTCACCTTAGCTCAGAAAGAGACTTCGCA
CTCCTCAGTCTCCAGGTGCCCTTGAAAGATGCGAAGAGCTGTGGCTCCATCAACTCCTCAGAGGCCCTGAGGTC
CAGCTGGTGGCCCATTCGCCATGGCTAAAGGACTCTCTGTCCAGAACGACAAACATCCAGGGTATCAACCTGCTC
TTCTCCTCTCGCCGGGGGCACCTCTTTTGCAGACGGACAGCCCATTTACAACCCTGGCCAGCGGGTTTCGGTAC
CGGGTCTTTGCTCTGGATCAGAAGATGCGCCCGAGCACTGACACCATCACAGTCATGGTGGAGAACTCTCACGGC
CTCCGCGTGCAGGAAGAAGGAGGTGTACATGCCCTCGTCCATCTTCCAGGATGACTTGTGATCCCAGACATCTCA
GAGCCAGGGACCTGGAAGATCTCAGCCCGATTCTCAGATGGCCTGGAATCCAACAGCAGCACCCAGTTTGAGGTG
AAGAAATATGTCCTTCCCAACTTTGAGGTGAAGATCACCCCTGGAAAGCCCTACATCCTGACGGTGCCAGGCCAT
CTTGATGAAATGCAGTTAGACATCCAGGCCAGGTACATCTATGGGAAGCCAGTGCAGGGGGTGGCATATGTGCGC
TTTGGGCTCCTAGATGAGGATGGTAAGAAGACTTTCTTTCGGGGGCTGGAGAGTCAGACCAAGCTGGTGAATGGA
CAGAGCCACATTTCCCTCTCAAAGGCAGAGTTCAGGACGCCCTGGAGAAGCTGAATATGGGCATTACTGACCTC
CAGGGGCTGCGCCTCTACGTTGCTGCAGCCATCATTGAGTCTCCAGGTGGGAGATGGAGGAGGCAGCTCACA
TCCTGGTATTTTGTGTCATCTCCCTTCTCCTTGGATCTTAGCAAGACCAAGCGACACCTTGTGCCTGGGGCCCCC
TTCTGCTGCAGGCCTTGGTCCGTGAGATGTGAGGCTCCCCAGCTTCTGGCATTCCTGTCAAAGTTTCTGCCACG
GTGTCTTCTCCTGGGTCTGTTCTGAAAGTCCAGGACATTACAGCAAAACACAGACGGGAGCGGCCAAGTCAGCATT
CCAATAATTATCCCTCAGACCATCTCAGAGCTGCAGCTCTCAGTATCTGCAGGCTCCCCACATCCAGCGATAGCC
AGGCTCACTGTGGCAGCCCCACCTTCAGGAGGCCCGGGTTTCTGTCTATTGAGCGGCCGGATTCTCGACCTCCT
CGTGTGGGGACACTCTGAACCTGAACCTTGCAGCGCTGGGCGAGTGGGGCCACCTTTTCTCATTACTACTACATG
ATCCTATCCCGAGGGCAGATCGTGTTTCATGAATCGAGAGCCCAAGAGGACCCTGACCTCGGTCTCGGTGTTTGTG
GACCATCACCTGGCACCTCCTTCTACTTTGTGGCCTTCTACTACCATGGAGACCACCCAGTGGCCAACTCCCTG
CGAGTGGATGTCCAGGCTGGGGCCTGCGAGGGCAAGCTGGAGCTCAGCGTGGACGGTGCCAAAGCAGTACCGGAAC
GGGGAGTCCGTGAAGCTCCACTTAGAAACCGACTCCCTAGCCCTGGTGGCGCTGGGAGCCTTGGACACAGCTCTG
TATGCTGCAGGCAGCAAGTCCCACAAGCCCCCTCAACATGGGCAAGGTCTTTGAAGCTATGAACAGCTATGACCTC
GGCTGTGGTCTTGGGGGTGGGGACAGTGCCCTTCAGGTGTTCCAGGCAGCGGGCCTGGCCTTTTCTGATGGAGAC
CAGTGGACCTTATCCAGAAAGAGACTAAGCTGTCCCAAGGAGAAGACAACCCGAAAAAGAGAAACGTGAACCTC
CAAAAGGCGATTAAATGAGAAATTGGGTGAGTATGCTTCCCCGACAGCCAAGCGCTGCTGCCAGGATGGGGTGACA
CGTCTGCCCATGATGCGTTTCTGCGAGCAGCGGGCAGCCCGCTGCGAGCAGCCGGACTGCCGGGAGCCCTTCTG
TCCTGCTGCCAATTGTCTGAGAGTCTGCGCAAGAAGAGCAGGGACAAGGGCCAGGCGGGCTCCAACGAGCCCTG
GAGATCCTGCAAGGAGGAGGACCTGATTGATGAGGATGACATTCCCGTGCAGCTTCTTCCAGAGAACTGGCTC
TGGAGAGTGGAACAGTGGACCGCTTTCAAATATTGACACTGTGGCTCCCCGACTCTCTGACCAGTGGGAGATC
CATGGCCTGAGCCTGTCCAAAACCAAGGCCTATGTGTGGCCACCCAGTCCAGCTCCGGGTGTTCCGCGAGTTT
CACCTGCACCTCCGCTGCCCATGTCTGTCCGCCGCTTTGAGCAGCTGGAGCTGCGGCCTGTCTCTATAACTAC
CTGGATAAAAACTGACTGTGAGCGTCCACGTGTCCCGAGTGGAGGGGCTGTGCCTGGCTGGGGGCGGAGGGCTG
GCCAGCAGGTGCTGGTGCCTGCGGGCTCTGCCCGCCTGTTGCCTTCTCTGTGGTGGCCACGGCAGCCACCGCT
GTGTCTCTGAAGGTGGTGGCTCGAGGGTCTTTCGAATTCCCTGTGGGAGATGCGGTGTCCAAGGTTCTGCAGATT
GAGAAGGAAGGGGCCATCCATAGAGAGGAGCTGGTCTATGAACTCAACCCCTTGGACCACCGAGGCCGGACCTTG
GAAATACCTGGCAACTCTGATCCCAATATGATCCCTGATGGGGACTTTAACAGCTACGTAGGGTTACAGCCTCA
GATCCATTGGACACTTTAGGCTCTGAGGGGGCCTTGTACCAGGAGGCGTGGCCTCCCTCTTGAGGCTTCCCTCGA
GGCTGTGGGGAGCAAACCATGATCTACTTGGCTCCGACACTGGCTGCTTCCCGCTACCTGGACAAGACAGAGCAG
TGGAGCACACTGCCTCCCGAGACCAAGGACCAGCCGTGGATCTGATCCAGAAAGGCTACATGCGGATCCAGCAG
TTTCGGAAGGCGGATGGTTCCATGCGGCTTGGTTGTACGGGGCAGCAGCACCTGGCTCACAGCCTTTGTGTTG
AAGGTCTGAGTTTGGCCCAGGAGCAGGTAGGAGGCTCGCCTGAGAACTGCAGGAGACATCTAACTGGCTTCTG
TCCCAGCAGCAGGCTGACGGCTCGTTCCAGGACCTCTCTCCAGTGATACATAGGAGCATGCAGGGGGGTTTGGTG
GGCAATGATGAGACTGTGGCACTCACAGCCTTGTGACCATCGCCCTTCATCATGGGCTGGCCGTCTTCCAGGAT
GAGGGTGCAGAGCCATTGAAGCAGAGAGTGAAGCCTCCATCTCAAAGGCAAGCTCATTTTTTGGGGGAGAAAGCA

WO 2004/030615

PCT/US2003/028547

2336/6881
FIGURE 2146B

AGTGCTGGGGCTCCTGGGTGCCCACGCAGCTGCCATCACGGCCTATGCCCTGACACTGACCAAGGCCCTGCGGAC
CTGCGGGGTGTTGCCACAACAACCTCATGGCAATGGCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTC
ACTGGTTCTCAGAGCAATGCCGTGTCGCCCCACCCGGCTCCTCGCAACCCATCCGACCCCATGCCCCAGGCCCA
GCCCTGTGGATTGAAACCACAGCCTACGCCCTGCTGCACCTCCTGCTTCACGAGGGCAAAGCAGAGATGGCAGAC
CAGGCTGCGGCCTGGCTCACCCGTCAAGGGCAGCTTCCAAGGGGGATTCCGCAGTACCCAAGACACGGTGATTGCC
CTGGATGCCCTGTCTGCCTACTGGATTGCCCTCCACACCACTGAGGAGAGGGGTCTCAATGTGACTCTCAGCTCC
ACAGGCCGGAATGGGTTCAGTCCCACGCGCTGCAGCTGAACAACCGCCAGATTTCGCGGCCTGGAGGAGGAGCTG
CAGTTTTCTTGGGCAGCAAGATCAATGTGAAGGTGGGAGGAAACAGCAAAGGAACCTGAAGGTCTTTCGTACC
TACAATGTCTGGACATGAAGAACACGACCTGCCAGGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTGAG
TACACGATGGAAGCAAACGAGGACTATGAGGACTATGAGTACGATGAGCTTCCAGCCAAGGATGACCCAGATGCC
CCTCTGCAGCCCGTGACACCCCTGCAGCTGTTTGAAGGTCGGAGGAACCGCCGAGGAGGGAGGCGCCCAAGGTG
GTGGAGGAGCAGGAGTCCAGGGTGCACTACACCGTGTGCATCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATG
GCCATCGCGGACGTACCCCTCCTGAGTGGATTCCACGCCCTGCGTGCTGACCTGGAGAAGCTGACCTCCCTCTCT
GACCGTTACGTGAGTCACTTTGAGACCGAGGGGCCCCACGTCTCTGTATTTTGACTCGGTCCCCACCTCCCGG
GAGTGCGTGGGCTTTGAGGCTGTGCAGGAAGTGCCGGTGGGGCTGGTGACCGGCCAGCGCAACCCGTGTACGAC
TACTACAACCCCGAGCGCAGATGTTCTGTGTTTACGGGGCACCAAGTAAGAGCAGACTCTTGGCCACCTTGTT
TCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTGCCCTCGCCAGCGTCGCGCCCTGGAGCGGGGTCTGCAGGAC
GAGGATGGCTACAGGATGAAGTTTGCCTGCTACTACCCCGTGTGGAGTACGGCTTCCAGGTTAAGGTTCTCCGA
GAAGACAGCAGAGCTGCTTTCCGCCTCTTTGAGACCAAGATCACCCAAGTCCTGCACCTCACCAAGGATGTCAAG
GCCGCTGCTAATCAGATGCGCAACTTCCTGGTTCGAGCCTCCTGCCGCTTTCGCTTGGAACCTGGGAAAGAATAT
TTGATCATGGGTCTGGATGGGGCCACCTATGACCTCGAGGGACACCCCAAGTACCTGCTGGACTCGAATAGCTGG
ATCGAGGAGATGCCCTCTGAACGCCTGTGCCGGAGCACCCGCCAGCGGGCAGCCTGTGCCAGCTCAACGACTTC
CTCCAGGAGTATGGCACTCAGGGGTGCCAGGTGTGAGGGCTGCCCTCCACCTCCGCTGGGAGGAACCTGAACCT
GGGAACCATGAAGCTGGAAGCACTGTGTCCGCTTTCATGAACACAGCCTGGGACCAGGGCATATTAAAGGCT
TTTGGCAGCAAAGTGTGAGTTGGC

WO 2004/030615

PCT/US2003/028547

2337/6881
FIGURE 2147

TGTGGCCACCCAGTTCAGCTCCGGGTGTTCCGCGAGTTCCACCTGCACCTCCGCCTGCCCATGTCTGTCCGCCG
CTTTGAGCAGCTGGAGCTGCGGCCTGTCTCTATAACTACCTGGATAAAAAACCTGACTGTGAGCGTCCACGTGTC
CCCAGTGGAGGGGCTGTGCCTGGCTGGGGGCGGAGGGCTGGCCAGCAGGTGCTGGTGCCTGCGGGCTCTGCCCG
GCCTGTGTGCTTCTCTGTGGTGCCACGGCAGCCACCGCTGTGTCTCTGAAGGTGGTGGCTCGAGGGTCTTTTGA
ATTCCCTGTGGGAGATGCGGTGTCCAAGGTTCTGCAGATTGAGAAGGAAGGGGCCATCCATAGAGAGGAGCTGGT
CTATGAACTCAACCCCTTGGACCACCGAGGCCGGACCTTGGAAATACCTGGCAACTCTGATCCCAATATGATCCC
TGATGGGGACTTTAACAGCTACGTACAGGGTTACAGCCTCAGATCCATTGGACACTTTAGGCTCTGAGGGGGCCTT
GTCACCAGGAGGCGTGGCCTCCCTCTTGAGGCTTCCCTCGAGGCTGTGGGGAGCAAACCATGATCTACTTGGCTCC
GACACTGGCTGCTTCCCCTACCTGGACAAGACAGAGCAGTGGAGCACACTGCCTCCCGAGACCAAGGACCACGC
CGTGGATCTGATCCAGAAAGGCTACATGCGGATCCAGCAGTTTCGGAAGGCGGATGGTTCCTATGCGGCTTGGTT
GTCACGGGGCAGCAGCACCTGGCTCACAGCCTTTGTGTTGAAGGTCTGAGTTTGGCCCAGGAGCAGGTAGGAGG
CTCGCCTGAGAACTGCAGGAGACATCTAACTGGCTTCTGTCCAGCAGCAGGCTGACGGCTCGTTCCAGGACCT
CTCTCCAGTGATACATAGGAGCATGCAAGGGGGTGGTGGGCAATGATGAGACTGTGGCACTCACAGCCTTTGT
GACCATCGCCCTTCATCATGGGCTGGCCGTCTTCCAGGATGAGGGTGCAGAGCCATTGAAGCAGAGAGTGGAAGC
CTCCATCTCAAAGGCAAGCTCATTTTTGGGGGAGAAAGCAAGTGCTGGGCTCCTGGGTGCCACGCAGCTGCCAT
CACGGCCTATGCCCTGACACTGACCAAGGCCCCCTGCGGACCTGCGGGGTGTTGCCACAACAACCTCATGGCAAT
GGCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTCACTGGTTCTCAGAGCAATGCCGTGTCGCCCACCCC
GGCTCCTCGCAACCCATCCGACCCCATGCCCCAGGCCCCAGCCCTGTGGATTGAAACCACAGCCTACGCCCTGCT
GCACCTCCTGCTTACAGAGGGCAAAGCAGAGATGGCAGACCAGGCTGCGGCCTGGCTCACCCGTACGGGCAGCTT
CCAAGGGGGATTCCGCGATACCCAAGACACGGTGATTGCCCTGGATGCCCTGTCTGCCTACTGGATTGCCTCCCA
CACCACTGAGGAGAGGGGTCTCAATGTGACTCTCAGCTCCACAGGCCGGAATGGGTTCAAGTCCCACGCGCTGCA
GCTGAACAACCGCCAGATTGCGGCCTGGAGGAGGAGCTGCAGTTTTCCTTGGGCAGCAAGATCAATGAAGT
GGGAGGAAACAGCAAAGGAACCCCTGAAGGTCTTTCGTACCTACAATGTCTTGACATGAAGAACACAGCCTGCCA
GGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTGAGTACACGATGGAAGCAAACGAGGACTATGAGGACTA
TGAGTACGATGAGCTTCCAGCCAAGGATGACCCAGATGCCCCCTCTGCAGCCCGTGACACCCCTGCAGCTGTTTGA
GGGTGCGAGGAACCGCCGAGGAGGGAGCGCCCAAGGTGGTGGAGGAGCAGGAGTCCAGGGTGCCTACACCGT
GTGCATCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATGGCCATCGCGGACGTACCCCTCCTGAGTGGATTCCA
CGCCCTGCGTGCTGACCTGGAGAAGCTGACCTCCCTCTCTGACCGTTACGTGAGTCACTTTGAGACCGAGGGGCC
CCACGTCTGCTGTATTTTGACTCGGTCCCCACCTCCCGGAGTGCGTGGGCTTTGAGGCTGTGCAGGAAGTGCC
GGTGGGGCTGGTGCAGCCGGCCAGCGCAACCCCTGTACGACTACTACAACCCGAGCGCAGATGTTCTGTGTTTTA
CGGGGCACCAAGTAAGAGCAGACTCTTGGCCACCTTGTGTTCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTG
CCCTCGCCAGCGTTCGCGCCCTGGAGCGGGGTCTGCAGGACGAGGATGGCTACAGGATGAAGTTTGCCTGCTACTA
CCCCCGTGTGGAGTACGGCTTCCAGGTTAAGGTTCTCCGAGAAGACAGCAGAGCTGCTTTCCGCCTCTTTGAGAC
CAAGATCACCCAAGTCTGCACTTACCAAGGATGTCAAGGCCGCTGCTAATCAGATGCGCAACTTCTGGTTTCG
AGCCTCCTGCCGCTTTCGCTTGGAACTGGGAAAGAATATTTGATCATGGGTCTGGATGGGGCCACCTATGACCT
CGAGGGACACCCCCAGTACCTGCTGGACTCGAATAGCTGGATCGAGGAGATGCCCTCTGAACGCCTGTGCCGGAG
CACCCGCCAGCGGGCAGCCTGTGCCAGCTCAACGACTTCTCCAGGAGTATGGCACTCAGGGGTGCCAGGTGTG
AGGGCTGCCCTCCACCTCCGCTGGGAGGAACCTGAACCTGGGAACCATGAAGCTGGAAGCACTGCTGTGTCCGC
TTTCATGAACACAGCCTGGGACCAGGGCATATTAAAGGCTTTTGGCAGCA

WO 2004/030615

PCT/US2003/028547

2338/6881
FIGURE 2148

ATTCTTGTCTGTTCTGCCTCACTCCCAGCTCTACTGACTCCCAACAGAGCGCCCAAGAAGAAAATGGCCATAAG
TGGAGTCCCTGTGCTAGGATTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA
ACATGTGATCATCCAGGCCGAGTTCATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA
TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGACGGTCTGGCGGCTTGAAGAATTTGGACGATTTGCCAGCTT
TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGACAAAGCCAACCTGGAAATCATGACAAAGCGCTCCAACTA
TACTCCGATCACCAATGTACCTCCAGAGGTAACCTGTGCTCACGAACAGCCCTGTGGAACCTGAGAGAGCCCAACGT
CCTCATCTGTTTCATAGACAAGTTCACCCCAACAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTAC
CACAGGAGTGTGAGAGACAGTCTTCCTGCCCAGGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCCT
GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA
GTTTGATGCTCCAAGCCCTCTCCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCCTGACTGTGGGTCTGGT
GGGCATCATTATTGGGACCATCTTCATCATCAAGGGATTGCGCAAAAGCAATGCAGCAGAACGCAGGGGGCCTCT
GTAAGGCACATGGAGGTGATGGTGTTCCTTAGAGAGAAGATCACTGAAGAACTTCTGCTTTAATGGCTTTACAA
AGCTGGCAATATTACAATCCTTGACCTCAGTGAAAGCAGTCATCTTCAGCATTTTCCAGCCCTATAGCCACCCCA
AGAGTGGTTATGCCTCCTCGATTGCTCCATACTCTAACATCTAGCTGGCTTCCCTGTCTATTGCCTTTTCCTGTA
TCTATTTTCCTCTATTTCCCTATCATTTTATTATCACCATGCAATGCCTCTGGAATAAAACATACAGGAGTCTGTC
TCTGCTATGGAATGCCCCATGGGGCATCTCTTGTGTACTTATTGTTTAAGGTTTCCTCAAACCTGTGATTTTTCTG
AACACAATAAACTATTTTGAAGATCTTGGGTGGAA

WO 2004/030615

PCT/US2003/028547

2339/6881
FIGURE 2149

MAISGVPVLGFFIIA VLMSAQESWAIKEEHVIIQA E FYLNPDQSGEFMFDGDEIFHVDMAKKETVWRLEEFGR
FASF EAQGALANIAVDKANLEIMTKRSNYTPIITNVPPEVTVL TN SPVELREPNVLICFIDKFTPPVVNVTLRNG
KPVITGVSETVFLPREDHLFRKFHYLPFLPSTEDVYDCRVEHWGLDEPLLKHWEFDAPSPLPETTENVVCALGLT
VGLVGIIIGTIFI I KGLRKSNA AERRGPL

WO 2004/030615

PCT/US2003/028547

2340/6881
FIGURE 2150

ATGAAGGCCAACTACAGCGCAGAGGAGCGCTTTCTCCTGCTGGGTTTCTCCGACTGGCCTTCCCTGCAGCCGGTC
CTCTTCGCCCTTGTCTCCTGTGCTACCTCCTGACCTTGACGGGCAACTCGGCGCTGGTGCTGCTGGCGGTGCGC
GACCCGCGCCTGCACACGCCCATGTACTACTTCTCTGCCACCTGGCCTTGGTAGACGCGGGCTTCACTACTAGC
GTGGTGCCGCCGCTGCTGGCCAACCTGCGCGGACCAGCGCTCTGGCTGCCGCGCAGCCACTGCACGGCCCAGCTG
TGCGCATCGCTGGCTCTGGGTTCCGCCGAATGCGTCCTCCTGGCGGTGATGGCTCTGGACCGCGCGGCCGAGTG
TGCCGCCCCGCTGCGCTATGCGGGGCTCGTCTCCCCGCGCCTATGTCGCACGCTGGCCAGCGCCTCCTGGCTAAGC
GGCCTCACCAACTCGGTTGCGCAAACCGCGCTCCTGGCTGAGCGGCCGCTGTGCGCGCCCCGCTGCTGGACCAC
TTCATCTGTGAGCTGCCGGCGTTGCTCAAGCTGGCCTGCGGAGGCGACGGAGACACTACCGAGAACCAGATGTTT
GCCGCCCCGCTGGTCATCTGCTGCTGCCGTTTGCCGTCATCCTGGCCTCCTACGGTGCCGTGGCCCGAGCTGTC
TGTTGCATGCGGTTTACGCGGAGGCCGAGGAGGGCGGTGGGCACGTGTGGGTCCCACCTGACAGCCGTCTGCCTG
TTCTACGGCTCGGCCATCTACACCTACCTGCAGCCCGCGCAGCGCTACAACCAGGCACGGGGCAAGTTCGTATCG
CTCTTCTACACCGTGGTTCACACCTGCTCTCAACCCGCTCATCTACACCCTCAGGAATAAGAAAGTGAAGGGGGCA
GCGAGGAGGCTGCTGCGGAGTCTGGGGAGAGGCCAGGCTGGGCAGTGA

WO 2004/030615

PCT/US2003/028547

2341/6881
FIGURE 2151

MEGTQEYDSSMQTVRFQGERRKSPSNATFSPFFWMPHSAKSLVADAGIHSRNQHSYAIASFYKYSQLHFKSRESR
AGARDQPIIWKLKANYSAEERFLLLGFSDWPSLQPVLFALVLLCYLLTLTGNSALVLLAVRDPRLHTPMYYFLCH
LALVDAGFTTTSVVPPLLANLRGPALWLPRSHCTAQLCASLALGSAECVLLAVMALDRAAAVCRPLRYAGLVSPRL
CRTLASASWLSGLTNSVAQTALLAERPLCAPRLLDHFICELPALLKLACGGDGDTTENQMFAARVVILLLPFAVI
LASYGAVARAVCCMRFSGGRRRAVGTCGSHLTAVCLFYGSAIYTYLQPAQRYNQARGKFVSLFYTVVTPALNPLI
YTLRNKKVKGAARRLLRSLGRGQAGQ

WO 2004/030615

PCT/US2003/028547

2342/6881
FIGURE 2152

GAGAGCACGACGTGCGCGCACCCCTCTCCCCTTGTCCACTGCTGCCGCCTCCTTCTTCTGCCGCTCCTGGTGCTGC
TTGTGTGCTCGTTTGGAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGACTCCGGCGCTCGCCATG
GCCGAAGAAAAGCCCAAGGAAGGAGTCAAGACTGAGAACAACGATCATATTAATTTGAAGGTGGCGGGGCAGGAT
GGTTCGTGGTGCAGTTTAAGATTAAAGAGGCATACACCACTTAGTAAACTAATGAAAGCCTATTGTGAACGACAG
GGATTGTCAATGAGGCAGATCAGATTCCGATTTCGACGGGCAACCAATGAAACAGACACACCTGCACAGTTGGAAA
TGGAGGATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTGAAAAGGGAACCTGCTTCTTT
ACTCCAGAACTCTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGAAAACTGCAATTTGCTTCCACCACATCC
TGACTACTACCGTATAGTTTTCTCTATTCTTTCAATTTCCCCCTTCCCCATTCTTTACTGTACATAAAGTAACTG
GTATATGTGCACAAGCATATTACTTTTTTTTTTTTAAAACTAAACAGCCAATGGTATGTTTTGATTGACATCAAGT
GGAGACGGGGCGGAAAAATACTGATTCTGTGAAAATACCCCCTTTCTCCATTAGTGGCATGCTCATTGAGCTCTT
ATCTTTATATTCCAGTAAGTTATTTTGCTCTCACTGTTTTAACAACAACAACAAAAAACAACAACATAAAAAATC
CTTGATACCTTGTTCAATTGGAGAATTTTAATGTTTTTCATTTATCATTGTAAAACCAAGGACAATTTTATAAC
TTTTTGTACTTAGCTGTTACATGCAGAGCAATCTGTCTTTAAGTAGGGATAAATTACTCTAAAACAAAAAAGAA
TCCTAGATAGTTTTCCCTTCAAGTCAAGCGTCTTGTGTTTAAATAAACTTCTTGTTAAAA

WO 2004/030615

PCT/US2003/028547

2343/6881
FIGURE 2153

MAEEKPKKEGVKTENNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPMKQTHLHSW
KWRMKIQLMCSNSRREVSTKGTCTFFPELCSLTKITFSIRKLQFASTTS

WO 2004/030615

PCT/US2003/028547

2344/6881
FIGURE 2154

GCGCACCCCTCTCCCCTTGTCCTGCTGCCGCCTCCTTCTTCTGCCGCTCCTGGTGCTGCTTGTGTGCTCGTTTG
GAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGACTCCGGCGCTCGCCATGGCCGAAGAAAAGCCC
AAGGAAGGAGTCAAGACTGAGAACAACGATCATATTAATTTGAAGGTGGCGGGGCAGGATGGTTCTGTGGTGCAG
TTTAAGATTAAGAGGCATACACCACTTAGTAACTAATGAAAGCCTATTGTGAACGACAGTGGAAATGGAGGATG
AAGATACAATTGATGTGTTCACACAGCAGACGGGAGGTGTCTACTGAAAAGGGAACCTGCTTCTTTACTCCAGAA
CTCTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGAAAAGTGAATTTGCTTCCACCACATCCTGACTACTA
CCGTATAGTTTTCTCTATTCTTTTCATTTCCCCCTTCCCCATTCTTTACTGTACATA

WO 2004/030615

PCT/US2003/028547

2345/6881
FIGURE 2155

AGACGCCGAGATGCTGGTCATGGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGCGGCCCTGGCCCTGACCGAGAC
CTGGGCGGGCTCCCACTCCATGAGGTATTTCTACACCTCCGTGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCAT
CTCAGTGGGCTACGTGGACGACACCCAGTTTCGTGAGGTTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCG
GGCGCCGTGGATAGAGCAGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTACAAGGCCCAGGCACAGAC
TGACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCACACCCTCCAGAGCAT
GTACGGCTGCGACGTGGGGCCGGACGGGCGCCTCCTCCGCGGGCATGACCAGTACGCCTACGACGGCAAGGATTA
CATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCCGCGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGA
GGCGGCCCGTGAGGCGGAGCAGCGGAGAGCCTACCTGGAGGGCGAGTGCGTGGAGTGGCTCCGCAGATACCTGGA
GAACGGGAAGGACAAGCTGGAGCGCGCTGACCCCCCAAAGACACACGTGACCCACCACCCCATCTCTGACCATGA
GGCCACCCTGAGGTGCTGGGCCCTGGGTTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGA
CCAAACTCAGGACACTGAGCTTGTGGAGACCAGACCAGCAGGAGATAGAACCCTTCCAGAAGTGGGCAGCTGTGGT
GGTGCCCTTCTGGAGAAGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCTCACCCCTGAG
ATGGGAGCCGTCTTCCCAGTCCACCGTCCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTCCTAGCAGTTGTGGT
CATCGGAGCTGTGGTCGCTGCTGTGATGTGTAGGAGGAAGAGTTTCAGGTGGAAAAGGAGGGAGCTACTCTCAGGC
TGCGTGCAGCGACAGTGCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAAAGCCTGAGACAGCTGTCTTGTGAG
GGACTGAGATGCAGGATTTCTTCACGCCTCCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGC
ACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCCACCCTTGTGTCCACTGTGA
CCCCTGTTCGCATGCTGACCTGTGTTTCTCCCCA .

WO 2004/030615

PCT/US2003/028547

2346/6881
FIGURE 2156

MLVMAPRTVLLLLSAALALTETWAGSHSMRYFYTSVSRPGRGEPRFISVGIVDDTQFVRFDSDAASPREEPRAPW
IEQEGPEYWDNRNTQIYKAQAQTDRESLRNLRGYYNQSEAGSHTLQSMYGCDVGPDGRLLRGHDQYAYDGKDYIAL
NEDLRSWTAADTAAQITQRKWEAAREAEQRRAYLEGECEVWLRRYLENGKDKLERADPPKTHVTHHPISDHEATL
RCWALGFYPAEITLTWQRDGEDQTQDELVETRPAGDRTFQKWAAVVVPSGEEQRYTCHVQHEGLPKPLTLRWEF
SSQSTVPIVGIVAGLAVLAVVVGAVVAAVMCRRKSSGGKGGSYQAACSDSAQGSDVSLTA

WO 2004/030615

PCT/US2003/028547

2347/6881
FIGURE 2157

GGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGCGGGCCCTGGCCCTGACCGAGACCTGGGCCGCCCCAGGCTCCCA
CTCCATGAGGTATTTTCGACACCGCCATGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCATCTCAGTGGGCTACGT
GGACGACACGCAGTTCGTGAGGTTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCGGGCGCCGTGGATAGA
GCAGGAGGGGCGGAGTATTGGGACCGGAACACACAGATCTTCAAGACCAACACACAGACTGACCGAGAGAGCCT
GCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCACACCCTCCAGAGCATGTACGGCTGCGACGT
GGGGCCGGACGGGCGCCTCCTCCGCGGGCATAACAGTACGCCTACGACGGCAAGGATTACATCGCCCTGAACGA
GGACCTGCGCTCCTGGACCGCGGGCGGACACCGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCCGTGTGGC
GGAGCAGGACAGAGCCTACCTGGAGGGCACGTGCGTGGAGTGGCTCCGCAGATACCTGGAGAACGGGAAGGACAC
GCTGGAGCGCGCGGACCCCCCAAAGACACACGTGACCCACCACCCCATCTCTGACCATGAGGCCACCCTGAGGTG
CTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGACCAAACCTCAGGACAC
TGAGCTTGTGGAGACCAGACCAGCAGGAGATAGAACCTTCCAGAAGTGGGCAGCTGTGGTGGTGCCTTCTGGAGA
AGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCCCACCCTGAGATGGGAGCCGTCTTC
CCAGTCCACCGTCCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTCTTAGCAGTTGTGGTCATCGGAGCTGTGGT
CGCTGCTGTGATGTGTAGGAGGAAGAGCTCAGGTGGAAAAGGAGGGAGCTACTCTCAGGCTGCGTGCAGCGACAG
TGCCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAAAGCCTGAGACAGCTGTCTTGTGAGGGACTGAGATGCAGG
ATTTCTTCACGCCTCCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGCACCTGAATGTGTCTG
CGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCCTTGTGTCCACTGTGACCCCTGTTCCCATGC
TGACCTGTGTTTCTCCCCAGTCATCTTTCTTGTTCAGAGAGGTGGGGCTGGATGTCTCCATCTCTGTCTCAAC
TTTACGTGCACTGAGCTGCAACTTCTTACTTCCCTACTGAAAATAAGAATCTGAATATAAATTTGTTTTCTCAA
TATTTGCTATGAGAGGTTGATGGATTAATTAAATAAGTCAATTCTGGAATTTGAGAGAGCAAATAAAGACCTGA
GA

WO 2004/030615

PCT/US2003/028547

2348/6881
FIGURE 2158

MLVMAPRTVLLLLSAALALTETWAGSHSMRYFDTAMSRPGRGEPRFISVGIVDDTQFVRFDSDAASPREEPRAPW
IEQEGPEYWDNRNTQIFKINTQTDRESLRNLRGYYNQSEAGSHTLQSMYGCDVGPDGRLLRGHNQYAYDGKDYIAL
NEDLRSWTAADTAAQITQRKWEAARVAEQDRAYLEGTCVEWLRRLRYLENGKDTLERADPPKTHVTHHPISDHEATL
RCWALGFYPAEITLTWQRDGEDQTQDTELVEVTRPAGDRTFQKWAAVVVP SGEEQRYTCHVQHEGLPKPLTLRWEF
SSQSTVPIVGIVAGLAVLAVVVGAVVAVMCRRKSSGGKGGSYSQAACSDSAQGS DVSLTA

PCT/US2003/028547

FIGURE 2159

CCGAGCTTCTTAAACACAGGCCTTGGGCCTACGGCTCTGGGGGTACTTGGGGGGGCGGGGGCAGGTCTGATGAGT
AACCCCTCCCCCAGGTTCCAGAGGAAGAAGCCTCCACATCTGTCTGCCGGCCCAAGAGTTCCATGGCCTCCACT
TCCCGCCGCCAACGCCGAGAACGTGCTTTCTGTCGTTACTTGTCTGCAGGACGGCTGGTCCGGGGCCAGGCCCTC
CTCCAGCGACACCCAGGCCTCGATGTAGATGCTGGGCAGCCCCACCCTGACACGGGGCTGTGCCCGCCACGAT
GCCCTTGCCTGTGCTGCTTTCGGCTCGGGGCTGACCCTGCCACCAGGACCGCCATGGGGACACGGCACTG
CATGCTGCTGCCCGCCAGGGCCCAGATGCCTACACCGATTTCTTCTCCCGCTGCTAAGCCGCTGTCCCTCCGCC
ATGGGAATAAAGAATAAGGATGGGGAGACCCCTGGCCAAATTTGGGCTGGGGACCCCCCTGGGATTCTGCTGAA
GAGGAGGAAGAAGATGATGCCTCCAAGGAGCGGGAATGGAGACAGAAGCTCCAGGGTGAGCTGGAGGACGAGTGG
CAGGAAGTCATGGGGAGGTTTGAAGGTGATGCCTCCCATGAAACCCAGGAACCTGAGTCCCTTCTCAGCCTGGTCA
GATCGCCTGGCCC GGGAACATGCCCAGAAGTGCCAGCAGCAGCAGCGAGAAGCAGAGGGGATCCCGTCGACCCCCA
CGTGCTGAGGGCTCCAGCCAGAGCTGGCGACAGCAGGAGGAGGAGCAGCGGGCTCTTACGGGAGCGAGCCCGGGCC
AAGGAGGAAGAGCTGCGTGAGAGCCGAGCCAGGAGGGGCGCAGGAGGCTCTAGGGGACCAGAGAACCAAGCCAACC
AGGGCCGGGGCCAGGGAAGAGCACCCAGAGGAGCGGGGAGGGGCAGCCTCTGGCGATTGGTGATGTGCCCTGG
CCCTGCCCTGGGGGAGGGGACCCAGAGGCCATGGCTGCAGCCCTGGTGGCCAGGGGGCCCCCTTTGGAGGAACAG
GGGGCTCTGAGGAGGTACTTGAGGGTCCAGCAGGTCCGCTGGCACCTGACCGCTTCTGACAGGATTCCGAAGC
CAGATTGAGACCTGGGAGCTGGGCCGTGTGATGGGAGCAGTGACAGCCCTTTCTCAGGCCCTGAATCGCCATGCA
GAGGCCCTCAAGTGACCTAGGGAAGAAGCAAGAACTTCGGGGCTGCAGCCTCAGGATGAGGCAGAAGGAAGGG
TAAGGGAAGGATGGGGACCACAAGGAAGAGCCAGGTGCTGCTCAGCAGAGGATATGGGTGGGAGCGAAAGTTGT
AACAAAGTGGGGGTGGGGGTGCGGGCCGCCACCACTGCTCCTTGACTCTGCCGTTTCTTAATAAGACCTGGTTCC
ACATCTC

WO 2004/030615

PCT/US2003/028547

2350/6881
FIGURE 2160

TCTAATACCTATTGATCTGTTACTTTCTCCCATCACGCTCAGGTGGGAACATCCAGTTGCAGGAAAACAAGCTTA
ACACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCTCAATGGCCTATTTAGGCCCATACCCTACGTCAC
GGCAGCCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTTGACCTCACCAGGCCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCCAGCCTCTGCCTCCCGT
CAGCCTCTACAGTCCCAACGTCTGCCTCACAGCAGATTCTTCACGCCCAGCTTCTACCTCACTTGGACCCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGGTGAAGCTCCTGCCTTTCGGCAGCCTCTCCAGGCCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCAGCCTCTGC
CTCACAGCGGACTCTC

WO 2004/030615

PCT/US2003/028547

2351/6881
FIGURE 2161

TGAGGGAGTGAGGGAAGCTTCCTCTGTATTTACAGCCACTCCCCTTTGCTCACATTCCCGCCTGAGCTCCACCTT
CTCAGATGAGCAGCAGCATTAGATGCTCATAGGAGAACGCACCCTGTTGTGAACCATGCATGTGAGGGATCTAGG
TTGCGCTGTCTTATGAGAGTCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGAACATCCA
GTTGCAGGAAAACAAGCTTAACACGCCCCTGATTCTACATTATGCTCCTACCTCCCGGCAGCCTCTCCAGGCCC
AGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCAAAATGGCCTATTTAGGCCCATAACCCTACGTC
ACGGCAGCCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTC
TTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACATTCTCAGGTCTCCCTCTGTTGTCCAAGG
CTGGAGTGTAGTAGTGCTATCGCAGCTGACTGCAGCCTCAACCTTCCAGGCTGAAGCGATCCTCCCACGTCAACC
TCCCACGTGGCTGAGACTACAGGTGCTTGCCACTATGCCCAACTAATATTTGGAATTTTCATATACGTGGATTCC
AGAGGGGTGACAGCGAAACGTGGGAACATCCAGTTGCAGGAAAACAAGCTTAACACGCCCCTGATTCTACATTA
TGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTC
TCAATGGCCTATTTAGGCCCATAACCCTACGTACGGCAGCCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTC
CACAGGCACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTC

WO 2004/030615

PCT/US2003/028547

2352/6881
FIGURE 2162

MAYLGPYPTSRQPPQMRLLPHNSLHRHSSIVTMASLDPAPASQPSLQALNFLKLTSPGPAHASLQPLQAQLLHLG
GPSRPSLCLEPSASTVPTSASQQILHAQLLPHLDPPDPDGVSLWHPQVKLLPFGSLSRPSSSCLPVASF GPAQLMP
PGGLPKPRF

WO 2004/030615

PCT/US2003/028547

2353/6881
FIGURE 2163

GGCACGAGGGCCGGAAGGCGGCGTCCGCGACGCAGCTGTTCACGCTTAGGTGGGCGACGTGGGCGCAGGTGGGCG
CAGGATGGCAAAACAGAAGAGAAAAGTTCTGAAGTGACAGAGAAAAAGAACAAAAGCTGAAGAAGGCGTCAGC
AGAGGGGGCCACTGCTGGGCCCTGAGGCTGCACCAAGTGGCGAAGGAGCCGGCTCCAAGGGCGAAGCTGTGCTCAG
GCCCCGGGCTGGACGCAGAGCCAGAGCTGTCCCCAGAGGAGCAGAGGGTCTTGAAAGGAAGCTGAAAAAGGAACG
GAAGAAAGAGGAGAGGCAGCGTCTGCGGGAGGCAGGCCTTGTGGCCCAGCACCCGCCTGCCAGGCGCTCGGGGGC
CGAACTGGCCCTGGACTACCTCTGCAGATGGGCCCAAAAGCACAGAAGTGGAGGTTTCAGAAGACGAGGCAGAC
GTGGCTCCTGCTGCACATGTATGACAGTGACAAGGTTCCCGATGAGCACTTCTCCACCCTGCTGGCCTACCTGGA
GGGGCTGCAGGGCCGGGCCCCGAGAGCTGACGGTGCAGAAGGCGGAAGCCCTGATGCGGGAGCTGGATGAGGAGGG
CTCTGATCCCCCCTGCCGGGGAGGGCCCAGCGCATCCGACAGGTGCTGCAGCTGCTCTCCTAGTGGGTTTCAGCG
CGGGGCGGGGCCGCTGCCAGTGACAGGGCTGCCTCAGACCACACAGGGTGCAGCTCCTCCGGCGGTGGGGGCCGG
GTTACACAGCAGGGCAGCGGCTGAGCAAGGGCTTTCAGCTCCTCCGGTGGTGGGGGCCGGGATCACCAGCACCAG
AGCCTCGCAAGGGCCCCCTTCCCTCCTCCAGACCCTCCTTGGCCGGTGACGGCTGTGACAGTGATGGCAGGTTTCAG
TGCCTTTCAGCGCAGAGCGTGGATGCTCTGGAATCACCCGGACCCCTGGCCTTGGAGGGACCCCTCCAGCCCCAGGA
ATCTGCTTTGGAGGGAAATGTCTATTTTCTACCGGGAATATTTTAGAGATTGGGGCATGCTGGCTCCTCCCGCC
AGCTGCAAACCTGCACCTTCCGCCTGATCCCGATCCCCCTGCGTGGGCCGCATTCTGGTCCCTGCCTGCGTC
CATCGAGGGGCTGGCTGTGGCCTGTTTTCTTTGACCCACACAGCGTCATTGCGGGTCATGGGGAGCCCCCTGG
TGGGAGCTTGTGGAGTCGGATCACGTACCTGTGCAGAAACCGCCTCTGTGGCTGCATTGAAATAAAACCCGACC
CAGCAGCAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2354/6881
FIGURE 2164

MAKQKRKVPEVTEKKNKKLKKASAEGPLLGPEAAPSGEGAGSKGEAVLRPGLDAEPELSPEEQRVLERKLKKERK
KEERQRLREAGLVAQHPPARRSGAELALDYLCRWAQKHKNWRFQKTRQTWLLLHMYDSDKVPDEHFSTLLAYLEG
LQGRARELTVQKAEALMRELDEEGSDPPLPGRAQRIRQVLQLLS

WO 2004/030615

PCT/US2003/028547

2355/6881
FIGURE 2165

GCGGCGCGCTGCAGGCGCGGGGAACACCAATGGCGGGGTACTTGAAGCTGGTGTGTGTTTCCTTTCAGCGTCAAG
GGTTCCACACTGTTGGGAGTCGCTGCAAGAATCGGACAGGCGCTGAGCACCTGTGGCTGACCCGACATCTCAGGG
ACCCATTTGTGAAGGCTGCCAAGGTGGAGAGTTACCGGTGTCGAAGCGCCTTCAAGCTCCTGGAGGTGAACGAGA
GGCACCAGATTCTGCGGCCCGGCCTTCGGGTGTTAGACTGTGGGCGAGCTCCTGGGGCCTGGAGTCAGGTGGCGG
TGCAGAAGGTCAACGCCGCGAGGCACAGATCCCAGCTCTCCTGTTGGCTTCGTGCTTGGGGTAGATCTTCTTCACA
TATTCCCCCTGGAAGGAGCAACTTTTCTGTGCCCTGCTGACGTGACTGACCCGAGAACCTCACAGAGAATCCTCG
AGGTGCTTCCTGGCAGGAGAGCAGATGTGATTCTGAGCGACATGGCGCCCAATGCCACAGGGTTCCGGGACCTCG
ATCATGACAGGCTCATCAGCCTGTGCCTGACCCTTCTCAGCGTGACCCGAGACATCCTGCAACCTGGGGGGACAT
TCCTTTGTAAAACCTGGGCTGGAAGTCAAAGCCGTCGGTTACAGAGGAGACTGACAGAGGAATTCCAGAATGTAA
GGATCATCAAACCTGAAGCCAGCAGGAAAGAGTCATCAGAAGTGTACTTCTTGCCACACAGTACCACGGAAGGA
AGGGCACTGTGAAGCAGTGAGGATTTCTTGTCCTTTTCATAATGGTCATTAGCTCCTTTTAAGCTAGAAACGT
AGCCTGAGCTCCTGAAGAGTTCTCTGGGAGATTTGAGCTGATTTTGAGATGGAGCAGGACAAGTGGGGAGTCTCT
CTCTCTCTTTCTCTCTCTCTCTTTTAAACCAAAAAGAGATGACAAAATAAGTTCAGGGGCCATGGAAAATGAAA
AAGTCCGCTATATTGTGATTTGGGAAGAGAAAGTTATCAAGAGAAAGAGGTGAGGATGGAAGGATGGAGAAAAC
AGACTGTGGGAAGGATCAGAAGGAATCCGCCGAGGCAGGGATGGGTGTGCCATGTGTGCCTTGACGGGACTTCA
TCTTATAGACTGTTAAACTGTCACACACAAACAGGCTTTCACCCCTGCTCTGAGAGCACCACGCACAGATTCC
AGTTCCTTAGTGTGGCTGTTTAAAGTAGAAAATCTGGGGGCTGGGTGAGGCCACTCATGCCTGTAAACCCAGGGCT
TTAGAAGGCTGAGGCTGGGGGATTGCTTGAAGTCAGGAGTTCAAGACCAACCTGGGCAACATAGCAACACCCCCC
ATGTCTACAAAAATGAAAAACCAAAAGCAAACCAAAAGAAAAATCTGAAATTTCCATCTGGGGATTAACTTCTG
TCTTTCTGGTGAACAATATAGCAATTCACGCATTCTTCAAGCAGCAAAAGTTCCTCGGAACAATTAGGGAAGACGT
ATGGTCTGAATTTATCCAGGCAGTGGGTCTGCTTTGGTTTTTGCTGGAAATTTATATCAGTGTCTGGGCTCCCAA
GAACATAAATGTAATTGCCAAAGCAAAAAA

WO 2004/030615

PCT/US2003/028547

2356/6881
FIGURE 2166

MAGYLKLVCSFQRQGFHTVGSRCKNRTGAEHLWLTRHLRDPFVKAAKVESYRCRSFAFKLLEVNERHQILRPGLR
VLDCGAAPGAWSQVAVQKVNAAGTDPSSPVGFVLGVDLLHIFPLEGATFLCPADVTDPRTSQRILEVLPGRADV
ILSDMAPNATGFRDLHDRLISLCLTLLSVTPDILQPGGTFLCKTWAGSQSRRLQRRLTEEFQNVRIIKPEASRK
ESSEVYFLATQYHGRKGTVKQ

WO 2004/030615

PCT/US2003/028547

2357/6881
FIGURE 2167

CGGCGGCCGCGGAGCCCTGCGAGTAGGCAGCGTTGGGCCCCATGCAGGACGCGGAGAACGTGGCGGTGCCCGAGGC
GGCCGAGGAGCGCGCCGAGCCCGGCCAGCAGCAGCCGGCCGCGCCAGCCGCGCCAGCCGAGGGGCTGCTGCGGCC
CGCGGGGGCCCGCGCTCCGGAGGCCGCGGGGACCGAGGCCTCCAGTGAGGAGGTGGGGATCGCGGAGGCCGGGCC
GGAGTCCGAGGTGAGGACCGAGCCGGCGGCCGAGGCAGAGGCGGCCTCCGGCCCCGTCCGAGTCCGCCCTCGCCGCC
GGCCGCCGAGGAGCTGCCCCGGTTCGATGCTGAGCCCCCTGTCCCGGCACAGGGCGAGGCCCCAGGAGAGCAGGC
TCGGGACGAGCGCTCCGACAGCCGGGCCAGGCGGTGTCCGAGGACGCGGGAGGAAACGAGGGCAGAGCGGCCGA
GGCCGAACCCCGGGCGCTGGAGAACGGCGACGCGGACGAGCCCTCCTTCAGCGACCCCGAGGACTTCGTGGACGA
CGTGAGCGAGGAAGAATTACTGGGAGATGTACTCAAAGATCGGCCCCAGGAAGCAGATGGAATCGATTCCGTGAT
TGTAAGTGGACAATGTCCCTCAGGTGGGACCCGACCGACTTGAGAACTCAAAAATGTCATCCACAAGATCTTTTC
CAAGTTTGGGAAAATCACAAATGATTTTATCCTGAAGAGGATGGGAAGACAAAAGGGTATATTTTCTGGAGTA
CGCGTCCCCTGCCCACGCTGTGGATGCTGTGAAGAAGCCGACGGCTACAAGCTTGACAAGCAGCACACATTCCG
GGTCAACCTCTTTACGGATTTTGACAAGTATATGACGATCAGTGACGAGTGGGATATTCCAGAGAAACAGCCTTT
CAAAGACCTGGGGAACCTTACGTTACTGGCTTGAAGAGGCAGAATGCAGAGATCAGTACAGTGTGATTTTGGAG
TGGAGACCGCACTTCCATATTCTGGAATGACGTAAAGACCCCTGTCTCAATTGAAGAAAGAGCGAGATGGACAGA
GACGTATGTGCGTTGGTCTCCTAAGGGCACCTACCTGGCTACCTTTTATCAAAGAGGCATTGCTCTATGGGGGGG
AGAGAAATTCAGCAAATTCAGAGATTCAGCCACCAAGGGGTTAGCTTATTGACTTCTCACCTTGTGAAAGGTA
CCTGGTGACCTTTAGCCCCCTGATGGACACGCAGGATGACCTCAGGCCATAATCATCTGGGACATCCTTACGGG
GCACAAGAAGAGGGGTTTTCACTGTGAGAGCTCAGCCATTGGCCTATTTTTAAGTGGAGCCATGATGGCAAATT
CTTTGCCAGAATGACCCTGGATACGCTTAGCATCTATGAAACTCCTTCTATGGGTCTTTTGGACAAGAAGAGTTT
GAAGATCTCTGGGATAAAAGACTTTTTCTTGGTCTCCTGGTGGTAACATAATCGCCTTCTGGGTGCCTGAAGACAA
AGATATTCAGCCAGGGTAACCCTGATGCAGTCCCTACCAGGCAAGAGATCCGAGTGAGGAACCTGTCAATGT
GGTGGAGTCAAGCTCCATTGGCAGAAGAACGGAGACTACTTGTGTGTGAAAGTAGATAGGACTCCGAAAGGCAC
CCAGGGTGTGTCAAAATTTTGAATTTTCCGAATGAGGGAGAAACAGGTACCTGTGGATGTGGTCGAGATGAA
AGAAACCATCATAGCCTTTGCCTGGGAACCAAAACAGGAAGATTGAACATCAAGATGTTTCGACAAGCAGCAGCGGAA
ATCTGTGTCTTTCTACCACGTCAAAAACAACGGGAAGATTGAACATCAAGATGTTTCGACAAGCAGCAGCGGAA
CACCATCTTCTGGAGCCCCCAAGGACAGTTCGTGGTGTGGCGGGCCTGAGGAGTATGAACGGTGCCCTTAGCGTT
TGTGGACACTTCGGACTGCACGGTCATGAACATCGCAGAGCACTACATGGCTTCCGACGTCGAATGGGATCCTAC
TGGGCGCTACGTGCTCACCTCTGTGCTCCTGGTGGAGCCATAAGGTGGACAACGCGTACTGGCTGTGGACTTTCCA
GGGACGCCTCCTGCAGAAGAACAACAAGGACCGCTTCTGCCAGCTGCTGTGGCGGCCCGGCCCTCCACACTCCT
GAGCCAGGAACAGATCAAGCAAATTAAGGAAGGATCTGAAGAAATACTCTAAGATCTTTGAACAGAAGGATCGTTT
GAGTCAGTCCAAAGCCTCAAAGGAATTGGTGGAGAGAAGGCGCACCATGATGGAAGATTTCCGGAAGTACCGGAA
AATGGCCCAGGAGCTCTATATGGAGCAGAAAAACGAGCGCCTGGAGTTGCGAGGAGGGGTGGACACTGACGAGCT
GGACAGCAACGTGGACGACTGGGAAGAGGAGACCATTGAGTTCTTCGTCAGTGAAGAAATCATTCCCCCTCGGGAA
TCAGGAGTGACCTGGAGCACTGTGCGCAGCCGTGTGTGCTGTGGAGCCGAGGCCGTCTGCAGGAAGCCGCGTGA
CTCCCGCCTCCTCCTGTGCTCTCTGGCTCTGGACTGTGACTGCGCCTGGATTCTGCCATTGCGACACATTTTGTG
TGCCTTTTCAGCCCCCTGGTGTCTGCAGTGGGGGATTTAAGGCACCCGCTTCCACTTCTTTCTGTGTTGGAGTTTTC
TGTGGAACCGCCGGCGTTGGCTCCGAAGACTTAGCGACGCCACTGGCGGCACCTTCTCCTGCGCCAGTGATGT
TTCCACGGTGCCGTGTACACAGCCGAGCAGCATTTCCGTTGAAGGACTTGATCCCCATTGCGGGCAGTGCTGGAC
GTGTCCCGGAGACCCACCGGGAGGGCGCCGCCATGCCCTGTACCCCCACCGTGACAGGTTGTGGCCGGTTTTCTCC
GCAGGTTGAACATGGAAATAAAAGCAAACCTTGTATG

WO 2004/030615

PCT/US2003/028547

2358/6881
FIGURE 2168

GTCCGAGCGACCGGCTTGGCGCCTGCCTGTCCCCAGCCCCCTCTCAGCTTGAACCTCTTCTTCAAGTCTGGGCC
TCGAGGCTTCCAGAGCGGCTCCAGGGGTGCAGTCTCAGTTCCCCACGCCAGCCGTCTCCGTCTCCGCCTCCTC
CGGGCCTGGCAGGTGGCACTGTCCGGAGGCGGAGCCTTGGGCGAGGGGTGGTTGCGGCGGAGGACGCAACCGAGC
GGGCTGCGGCCTCACCATGGACCCAGAATGCGCCAGCTGCTCCCGCTCTCTGTGCTGTTCTGGTAGATCCCA
GGCAGCCGGTGGCAGATGACACCTGTTTGGAGAAGCTCCTGGACTGGTTTAAAACGGTCACTGAAGGAGAGTCCA
GTGTCGTGCTGCTGCAGGAGCACCCCTGCCTGGTGGAGCTGCTGTCCC**ATCT**GCTGAAAGTCCAGGACCTGAGTT
CTGGGGTCTCTCCTTCTCACTGCGCCTGGCAGGAACCTTCGCAGCCCAGGAAAACCTGCTTCCAGTATCTTCAGG
TGCGGTGCACACCATCTTCTCCCTGCAGGGAGACTCCAGCCTGTTTGTGGCCTCGGCGGCCAGTCAGCTCCTGGT
GCACGTCTGGCTTTGTCCATGCGAGGTGGAGCCGAGGGGCAGCCCTGCCTGCCGGGGGGTGAAGTGGCCCGCTG
TGCCCAAGATCATGGATCACGTTGAAGAGTCTTGTGCTCCGCGGCCACCCCAAGGTCACTCAGGCCCTGAA
CGTCTGACCACGACCTTCGGGCGCTGCCAGAGCCCCTGGACGGAAGCCCTGTGGGTGCGGCTGAGTCCCGCGCT
GGCCTGTCTGCTGGAGAGAGACCCCATCCCCGCCGACACTCGTTTCGTGGACCTGCTTCTCTGTGTGGCTCGTTC
TCCCGTGTTCAGTTCTTCCGACGGCAGCCTGTGGGAGACAGTGGCGCGGGCTCTGAGCTGCCTGGGTCCCACCCA
CATGGGACCCCTGGCTTTGGGGATCCTGAAGCTCGAGCACTGTCCACAGGCACTGAGGACCCAGGCCTTCCAGGT
CCTTCTCCAGCCCCCTGGCCTGTGTCTGAAGGCCACGTTTACGGCCCCCGACCCCAAGGCTTGTGGACGGGAC
GGCAGACGATGCCACGACGGTGGACACACTCCTGGCCTCCAAGTCGTCTGCGCCGGCCTCCTGTGCCGACCCCT
GGCTCACCTGGAGGCTGCAGCCGCTGCCCCAGCGCCCTTACCGTGGCCCCAGGCGTCTCTACTGGGGGCTAC
AGTGACTGTCTGCGGCTCTGTGACGGCTCGGCTGCCCCTGCCTCCAGTGTGGGGGGCCACCTCTGTGGGACCCCT
GGCGGGCTGCGTCCGGGTCCAGCAGCAGCCCTCGACTTCTTGGGGACGCTGTACAGGGGACAGGCCCCCAGGA
GCTGGTGACGACGGCGCTTGTGTCTCCTCTGGAGTGCCTCGAGAGCCCCGGCTCCAGCCCCACGGTTCTGAAGAA
GGCCTTCCAGGCCACGCTCAGGTGGCTCCTGAGCTCACCAAGACCCCGGCTGCTCTGATCTCGCCCCCTCAT
CCCGCAGTTCTCAGAGAGCTGTTCCCTGTGTGTCAGAAACGCTGTGCCACCCCTGCTGGGAGGTGAGGGACTC
CGCCCTCGAGTTCTTGACCCAGCTGAGCAGGCACTGGGGAGGACAGGCTGACTTCAGATGCGCACTCTTGGCTTC
AGAGGTGCCTCAGCTGGCCCTGCAGCTCCTCCAGGACCTGAGAGTTATGTCCGAGCGAGTGCAGTGACCGCCAT
GGGGCAGCTGTCCAGCCAGGGCCTGCACGCCCCACCAGCCCTGAGCATGCAGAGGCCCGGCAGAGCCTGTTCTCT
GGAGCTCCTGCACATCCTCTCCGTAGACTCGGAGGGCTTCCACGGCGGGCGGTGATGCAAGTCTTCACTGAGTG
GCTGCGGGACGGCCACGCCGACGCGGCCAGGACACGGAGCAGTTCGTGGCCACTGTGCTGCAGGCGGCGAGCCG
AGACCTGGACTGGGAGGTCCGCGCCCAGGGCCTGGAGCTGGCCCTCGTGTCTTGGGCCAGACTTGGGGCCGCC
GCGTACCCACTGCCCCATGCGCGTGGCCGTACCCGAGGTGGCCCCAGCCCAGCCACTCACCGAGGCACTGAGGGC
TCTCTGCCACGTGGGGCTCTTTGACTTCGCCCTTTTGTGCTTGTGTTGACTGCGACCGCCCTGTGGCGCAGAAGTC
TTGTGACCTCCTTCTCTTCTGAGGGACAAGATTGCTTCTACAGCAGCCTGCGGGAGGCCAGGGGCAGCCCCAA
CACTGCCCTCCGAGAGGCCACCCCTGCCGAGGTGGCGGGCGGGTGAGCAGGCCAGCCCCAGGGGACAGGAGCC
TGAGGCTGTGCTGGCCATGCTCAGGTCCCTAGACCTGGAGGGCCTGCGGAGCACGCTGGCCGAGAGCAGCGACCA
CGTGAAAAGAGTCCCCAGTCCCTCCTGCAGGACATGCTGGCCACGGGAGGCTTCTGTCAGGGGGACGAGGCCGA
CTGCTACTGAGCAGAACCAGAGTCTGCCACTGGGGCTCAGGACCAAGGGAGGCAGCACCATGTCTTCTGTGGGA
CACTGCCAGCCCCAGGGCTCCAGCCCAGCCCGGTGGATCCTCTGGGGAAAGCCAGGACCAGGAGAGAAGCAAGGTC
AAGAAATCCCACAGTTTGATGTATTAAAGAAATGACTTATTTCTACTCAAAATAAATGGCATTGAAGTCTTTCTT
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WO 2004/030615

PCT/US2003/028547

2359/6881
FIGURE 2169

MRGGAEGQPCLPGGDWPACAQKIMDHVEESLCSAATPKVTQALNVLTTFGRCQSPWTEALWVRLSPRVACLLER
DPIPAAHSFVDLLLCVARSPVFSSSDGSLWETVARALSCLGPTHMGPLALGILKLEHCPQALRTQAFQVLLQPLA
CVLKATVQAPGPPGLLDGTADDATTVDTLASKSSCAGLLCRTLAHLEELQPLPQRPSWPQASLLGATVTVLRL
CDGSAAPASSVGGHLCGTLAGCVRVQRAALDFLGTLGQGTGPQELVTQALAVLLECLESPGSSPTVLKKAQATL
RWLLSSPKTPGCSDLGPLIPQFLRELFPVLQKRLCHPCWEVRDSALEFLTQLSRHWGGQADFRCALLASEVPQLA
LQLLQDPESYVRASAVTAMGQLSSQGLHAPTSPHEAEARQSLFLELLHILSVDSSEGFPRRAVMQVFTEWLRDGH
DAAQDTEQFVATVLQAASRDLDWEVRAQGLELALVFLGQTLGPPRTHCPYAVALPEVAPAQPLTEALRALCHVGL
FDFAFCALFDCDRPVAQKSCDLLLFLRDKIASYSSLREARGSPNTASAEATLPRWRAGEQAQPPGDQEPEAVLAM
LRSLDLEGLRSTLAESSDHVEKSPQSLLQDMLATGGFLQGDEADCY

WO 2004/030615

PCT/US2003/028547

2360/6881
FIGURE 2170A

GGCGGCCGAGCGGAGCCGAGCGCAGCCGAGCCGGGCGGAGCCGGGCGGGCCAGGAGCGCGCGGATGAT
GCGGGCGGCCAGGCGGGGGTTCGACGGGTCCCTGAAGCCCCGCGCCCCGGGCCAGCAAGGGAGCCCCGCGCAGGCCG
CGCGCATCCGGAGGCGGCCGGGCCCCGCCATGGCGGGGTTCAGCTACGCGGCGCCCTGGTGGGTGAGCCTCCTGC
ACCGGCTGCCCCACTTCGACCTGAGCTGGGAGGCCACTAGCAGCCAGTTCCGGCCCCGAGGACACCGACTACCAGC
AGGCCCTGCTGCTCCTGGGGGCCCGCCCTGGCCTGCCTCGCCCTGGACCTCCTCTTCTGCTCTTCTACTCCT
TCTGGCTGTGCTGCCGGCGGCGCAAGAGCGAGGAGCACCTGGACGCCGACTGCTGCTGCACGGCCTGGTGTGTCA
TCATCGCCACGCTGGTGTGCAGCGCCGGCATCGCAGTGGGATTCTACGGCAACGGGGAGACCAGTGATGGCATCC
ATAGGGCCACCTACTCGCTCCGCCACGCCAACCGCACGGTGGCCGGGGTCCAGGACCGCGTGTGGGACACGGCGG
TGGGGCTGAACCACACGGCGGAGCCAGCCTGCAGACCCTGGAGCGGCAGCTGGCCGGGCGGCCGAGCCCCCTGC
GAGCCGTACAGAGGCTGCAGGGCCTGCTGGAGACGCTGCTGGGCTACACGGCCGCCATCCCCCTTTTGGAGGAACA
CGGCGGTGCTCGCTGGAGGTGCTGGCGGAGCAGGTGGATCTCTACGACTGGTACAGGGTCTGCCTGCTGGGAGTCC
TGGCCCTGGTTCATCAGCTGGGGCGCGCTGGGCTTGGAGCTGGCTGTGTCCGTGGGCTCCAGCGACTTCTGTGTGG
ACCCTGACGCCTACGTGACCAAAATGGTGGAGGAGTACTCGGTGCTGAGTGGGGACATCCTGCAGTACTACCTGG
CCTGCTCGCCCCGCGCCGCCAACCCCTTCCAGCAGAAGCTGTGGGCGAGCCACAAGGCACTGGTGGAGATGCAGG
ATGTGCTGGCTGAGCTTCTGAGGACCGTCCCCTGGGAGCAGCCGGCCACTAAGGACCCCCCTCCTCCGCGTCCAGG
AGGTGCTGAATGGCACGGAGGTGAACCTGCAGCACCTCACCGCCCTGGTGGACTGCCGCAGCCTGCATCTGGACT
ACGTGCAAGCGCTGACCGGCTTCTGCTATGACGGCGTGGAGGGCCTCATCTACCTGGCCCTCTTCTCCTTCGTCA
CAGCCCTCATGTTAGCTCCATCGTCTGCAGCGTCCCGCACACCTGGCAGCAAAAGAGAGGCCCTGATGAGGACG
GGGAGGAGGAGGCCGCTCCAGGGCCGCGGCAGGCGCACGACAGCCTCTACCGCGTCCACATGCCAGCCTGTACA
GCTGTGGCAGCAGCTACGGCAGTGAGACCAGCATCCCGGCCGCGGCCACACCGTCAGCAACGCCCGGTCAGTG
AGTACATGAGCCAGAACGCTAATTTCCAGAACCCCCGCTGTGAGAACACCCCACTCATTGGGCGCGAGTCCCCGC
CGCCCTCATACACCTCCAGCATGAGAGCCAAATACCTCGCCACGAGCCAGCCTCGCCCTGACTCCAGCGGCAGCC
ACTAGACCGCGCCCCGGCAGCCACCCACCCACGTCGCAACTTCCCCTCCCCGTGCCAGCACTGCCGCTTCCACCT
GGGCCACCCACCGGACCCCTCGCACGCCGTGCCAGGCCTGCCCCAGACGCGTCTGCAGGCCGCTTGCCTCCTGTC
CCCTCCCCGCGAGGGGCACAGTGGAGACGCAGGGGCTCTGGGCGCGTACCGCCAACTCGGGTCACACCTGAACGCT
GCTGCCAGCCGATGCCCCAGCCCTGCACGCCACCCACTATCCGGCACGCTCCCTCTGCAGATGGTGCCTGCACCC
TACAAGCCCTGGCCGCACCCAACTGTGTTGTTGCCGCCCGGCCCTTCCCTCCACAGCTCTCCTTCCCTCCCGCCC
GGCACTTCTGTGGACCCCTTCTAGTTACAGGCACGGCTGGGGCGGCTCTGTGCTGGCGCCTGCTGGCCACTGA
GGGACAGGGACACGTGCCACCTGCTCATCTCTGAGGTACCCCGTGGTCCCTCCACGTGCCCATCTCTCT
GCAGTGCCCTCCTCGCTGTGCAGCCCGGCCACCCACAGGCTCACCCCTCCTGCCGGCTGCCAGAGGCCCTCC
AGCAGGGCCTCTCTCCGTTGCCCCAGCTTCACTCTCTCCCTCAGCACCTGCCCTGCTGGAGGCCCCAGCCCTCCG
TGGACAGCAGGGGCCACGTGGAGCCCGGGCGCTCACCGCCACCCAGTGCTGGCCGCTTCTTGGTGCCAAACC
CCCTTCCCCACCCAGAGACTGGGCAGCTGTGTCTGGTTCTTTGCACTAACCAATTGTCTATCTTAGGG
CAGGCTGGGGCTGCGGGCTGAGGGGGACCGCTGGCACCCCCCTTCCCTCCCTTCTTGGTTCCATTTCATCCATG
ACAGGTACAGCATCCAGGAGCCCGGCTGAGGGGCTGGACCCGAGCCGGCTGTGAACATCCCTCAGCCCCCTGCT
GTCCCCCTTGGGACTAACCACTAACCTACCCCCAACTCCACGGGTGCCCTAGCTGGCCCAGAGCCGGCAGT
GTGAGCCCAAGTCCGGGCTGGAGCCGAGGCCGGAGCAGCTGTCTGGGAGTCAAGGCTGCAGTAGCGTTTCTTCAT
GGGGTGTCTCAGGGGGTGCCACAGACCAGAGGCAGCCAAAGGGCTGGACACCCCTCCCCAGGCAGGTGCTGCC
CCAGGAGGACTGTCTCGGGAATGAACCTCCCGCGGGCTTTGGACTGAGGTCCCTGTGGCCTCGGTCTCTCTCCC
ATGAAGTGGGAGCGAGGCTCCCCAATGGTGCTTTTGGCTTTAGTGATGATGTTTGCTGTGCTTCCCGCCGTGGA
GGGCAGAGCCACCCACATCAGGATCGGACGTGCTACCCCTCCCGGTCCCGGCCCTGGCCCAGCCAGCCAGCCC
TCGAGGCTCGATGCCTGTGCCAAGGCCAGGGGCGAGCCAGAGGGCAGCTGGATGGCCACGTGCAGGGGTCAAGGCT
GGGCCCTGCAGTGGGGCGGGCCGCCAGCCCCAGCAGTTTACAGACGCATGGCTCTTCTCTCCAGAGCAGCCGGCA
GCTACCTGGACCGGAAATGTCTCATCCCCCTCCCTGGGGCCAGGCTCTGCCCTGGCCTTCTCTGTGAACCCCTC
CTTTCTTTGTGCTGGTGTCTGGGACCAAAAAGGGGAATATGGGAGGGCAGAGTGGGGAGGGAGTCCATGGGCC
TGGGGCCCCAAGCCGGGGCGTCTGAGCTCCCCAGGCATGACCAAACTCAGTGGAGGGGCTCTGCTTCAGGCC
CGCTGGCTGACATTCTGAGCCCCCTCGGAGGCCCGCCACAGCCAACTGCCAGTCTTTCTCTGGGCTTGA
CCCGCCAGGGGAGTTCTCCAGGCCTAGGGCCAGGAGAGAGGCCCTGGCACCTGGCGTGGGTGCCCGCCAAACGC

WO 2004/030615

PCT/US2003/028547

2361/6881
FIGURE 2170B

CCTGCGACCGCTCAGAAGCACAAATGCTGTCCATGGCCGTGAGGCTGCCTGCCAGGTGAATGGACATAGCGTGAG
AGGCGGTGAGGCCAGGGCTTCCAGCCTCGTGCTGTCTCGGGACTCCTGACCGTGGTGTGCGTGTGTGCCCCGTCTG
TGACTTTCTACTCACCAAGGTTGAAGAAAGGAAACGGGGAAAAATCAAAAGGGGTTCAAACCCACCTCAGTAGGT
GGAGGGGAGCGCCTGCCATTGGTTGTATTTTTGTTCTGAGTTTTCGGTGCCGTGTTCCCTAACTACTCCATCCCAT
GACCTCGCCACACCTACTGGGGCATCTGGCTGGTGCCCTGCTGCCATGGCCAGCCCCACTCTCACCTGCACAGG
GGGTCTTGACAGCCCCAGGCCACAGCCTCGTTGGGAGGACAGGGTGGCCCTGGGGACAAGAGGGAGGAGCCCAG
GGGCTTACCTCACTGAGAGTGCTCCCCAGCAGGCATCCACTACCCAGGGCCCCCACATGTCATGGCAAGGTTG
GTAGTGAATGGGCCTGGTTGGGAGCAGCCCCCTGGCCCATTGCCCCACCCACCCATCTCACTATGCAATTCGAGTTC
CAAGCAACATTTGCTCCTGCCCTGGGGCCAGCTCTGCCCCAGCCCTGAGAGGGGTGGTGAGGCAGCCCCCTGGAC
CCCAGAACCCAGACAAGGGGGCAGGCGGGGGACCAGGGCCTCTCCTGTGGGATCTTTGTTTTGTGTTTAACCAT
AATGGTTGTGTACTGAACCACTTCATATTTGTTATATATAATATATATATATAATCTCCTTAAGACTCAGCCT
CCTGGTTTACCCCCCGGCCCTGGGCATCTGACCTCCCCACCCAGTGTGATTTAACATCCAGGAAGTGAAGCCT
GAACCATTTTGCATTTCCCCCTCCTCCAGCCTCTGTAGGGCCATGGCTGTATGTACTGTCGCTGTGTTTTTTGT
TTTTTTAGAACTGGGTTTGGGGGCTGATTTTTATTTCTTTGGGGGCTTTTTTCTTGGCAAATACTAAAAATCTC
GTCAATGTAATTTCTGTGGTTTCTATTCAGCTTGGGTTTCATGTTTTAAATAAATTTTAAAAAGC

WO 2004/030615

PCT/US2003/028547

2362/6881
FIGURE 2171

MAGVSYAAPWWVSLHRLPHFDLSWEATSSQFRPEDTDYQQALLLLGAAALACIALDLLFLFYFWLCCRRRKS
EEHLDADCCCTAWCVIIATLVCSAGIAVGFGNGETSDGIHRATYSLRHANRTVAGVQDRVWDTAVGLNHTAEPS
LQTLERQLAGRPEPLRAVQRLQGLLETLLGYTAAIPFWRNTAVSLEVLAEQVDLYDWYRVCLLGVLALVISWGAL
GLELAVSVGSSDFCVDPDAYVTMVEEYSVLSGDILQYYLACSPRAANPFQKLSGSHKALVEMQDVVAELLRTV
PWEQPATKDPLLRVQEVNLNGTEVNLQHLTALVDCRSLHLDYVQALTGFCYDGVGLIYLLALFSFVTALMFSSIVC
SVPHTWQKRGPDDEGEEEAAPGPRQAHDLSLYRVHMPSLYSCGSSYGSETSIIPAAAHTVSNAPVTEYMSQANANFQ
NPRCENTPLIGRESPPPSYTSSMRAYLATSQPRPDSSGSH

WO 2004/030615

PCT/US2003/028547

2363/6881
FIGURE 2172

ACAGAACAGAGAGAAAGGAACCTTTGTCTTTCGTGTGAATGCTCGTGAGGGGCCATCCTTAGAGTGGAAATGCTC
CTGAGGGCTCCAGCGAATCAAGACCCCTCAGACCCCCGGGCTGTCCCCACCCCATGACCACATGTTCCGCAGGCACC
CTCAGCGCTGTGCCCTGCGTGTGCGCCAGGCAGGTGTTTGTGTTTTGAGCGCAGATTCTGCCTGTGGCATAGCCAT
GTGGAGATGTTACGCGATGTACTTCCCTTTGTGATTTTCAGCCGATACGGAAGATGTGTGCATTGTAGAGAGATTG
TTCTCCAGCAGCCTAGTGGCCATCGTGAGCCTTAAAGCACCAAGGAAGCTAAAGGTTTGCCACTTTAAGAAGGGA
ACTGAGATCTGCAACTACAGCTACTCCAACACGATTCTGGCTGTGAAGCTCAACAGGCAGAGGCTGATAGTATGC
CTGGAGGAGTCCCTGTACATCCACAACATTCGGGACATGAAGGTGCTGCATACGATCAGGGAGACGCCTCCAAAC
CCTGCAGGCCTGTGTGCGCTGTCAATCAACAACGACAACCTGCTACTTGGCGTACCCAGGGAGCGCGACCATCGGA
GAGGTGCAGGTCTTCGATACCATTAAATTTGAGAGCTGCAAAACATGATTCCGGCTCACGACAGTCCTTTAGCGGCA
CTGGCCTTTGACGCAAGTGGAACATAACTTGCCACGGCTTCGGAGAAGGGGACCGTGATTAGGGTATTTTCCATT
CCAGAAGGACAAAACTCTTTGAGTTTCGGAGAGGAGTAAAGAGGTGCGTGAGCATCTGCTCCCTGGCCTTCAGC
ATGGACGGCATGTTCTCTCCGCCTCCAGCAACACTGAGACCGTGACATCTTCAAACCTCGAGACTGTGAAAGAA
AAACCCCCAGAGGAGCCCAACCTGGACCGGGTACTTCGGGAAAGTGCTCATGGCCTCCACCAGCTACCTGCCT
TCCCAAGTGACAGAAATGTTCAACCAGGGCAGAGCTTTCGCCACGGTCCGCCTGCCATTCTGCGGCCACAAAAAC
ATCTGCTCGCTAGCCACAATTCAGAAGATCCCGCGGTTGTTGGTGGGTGCCGCCGACGGGTACCTGTACATGTAC
AACCTGGACCCCCAGGAGGGCGGCGAGTGTGCCCTGATGAAGCAGCACCGGCTGGACGGCAGTCTGAAAACGACC
AATGAGATCTTGACTCTGCCTCTCACGACTGCCCCCTTAGTCACTCAGACATACGGCGCAGCTGCAGGAAAAGCC
TACACAGACGACCTGGGTGCTGTGGGTGGCGCCTGCCTGGAGGACGAGGCCAGCGCCCTGCGCCTGGATGAGGAC
AGCGAGCACCCGCCCATGATTCTTCGGACTGACTGAACTTGACCTGTGACCTCTGACCCGGGGAGCAGAGAACAC
TGGCTTCACAGAGGACTTTGTGCATTGCTGCTATGAACTTTGACCTGAGTCGGGGGAGAGGATGGCAGAGACTTT
ATT

WO 2004/030615

PCT/US2003/028547

2364/6881
FIGURE 2173

MLLRLQRIKTLRPPGCPHPMTTCSAGTLSAVPCVSPRQVFVFERRFCLWHSVEMFTHVLPFVISADTEDVCIVE
RLFSSSLVAIVSLKAPRKLKVCHFKKGTEICNYSYSNTILAVKLNRLIVCLEESLYIHNIIDMKVLHTIRETP
PNPAGLCALSINNDNCYLAYPGSATIGEVQVFDITNLRAANMIPAHDSPLAALAFDASGTKLATASEKGTVIRVF
SIPEGQKLFEFRRGVKRCVSICSLAFSMDGMFLSASSNTETVHIFKLETVKEKPPEEPTTWGTFYFGKVLMASTSY
LPSQVTEMFNQGRAFATVRLPFCGHKNICSLATIQIPRLLVGAADGYLYMYNLDPQEGGECALMKQHRDGLK
TTNEILDSASHDCPLVTQTYGAAAGKAYTDDLGA VGGACLEDEASALRLDEDESEHPPMILRTD

WO 2004/030615

PCT/US2003/028547

2365/6881
FIGURE 2174

CGCGTCCGCCCCGCGAGCACAGAGCCTCGCCTTTGCCGATCCGCCGCCCGTCCACACCCGCCGCCAGCTCACCAT
GGATGATGATATCGCCGCGCTCGTCGTGACAAACGGCTCCGGCATGTGCAAGGCCGGCTTCGCGGGCGACGATGC
CCCCCGGGCGCTCTTCCCCTCCATCGTGGGGCGCCCCAGGCACCAGGGCGTGATGGTGGGCATGGGTGAGAAGGA
TTCCTATGTGGGCGACGAGGCCAGAGCAAGAGAGGCATCCTCACCCTGAAGTACCCCATCGAGCACGGCATCGT
CACCAACTGGGACGACATGGAGAAAATCTGGCACCACACCTTCTACAATGAGCTGCGTGTGGTCCCCGAGGAGCA
CCCCGTGCTGCTGACCGAGGCCCCCTGAACCCCAAGGCCAACCGCGAGAAGATGACCCAGATCATGTTTGAGAC
CTTCAACACCCCAGCCATGTACGTTGCTATCCAGGCTGTGCTATCCCTGTACGCCCTCTGGCCGTACCACTGGCAT
CGTGATGGACTCCGGTGACGGGGTCACCCACACTGTGCCATCTACGAGGGGTATGCCCTCCCCCATGCCATCCT
GCGTCTGGACCTGGCTGGCCGGGACCTGACTGACTACCTCATGAAGATCCTCACCAGCGCGGCTACAGCTTCAC
CACCACGGCCGAGCGGGAAATCGTGCGTGACATTAAGGAGAAGCTGTGCTACGTCGCCCTGGACTTCGAGCAAGA
GATGGCCACGGCTGCTTCCAGCTCCTCCCTGGAGAAGAGCTACGAGCTGCCTGACGGCCAGGTCATCACCATTGG
CAATGAGCGGTTCCGCTGCCCTGAGGCACTCTTCCAGCCTTCCTTCCTGGGCATGGAGTCCGTGTGGCATCCACGA
AACTACCTTCAACTCCATCATGAAGTGTGACGTGGACATCCGCAAAGACCTGTACGCCAACACAGTGCTGTCTGG
CGGCACCACCATGTACCCTGGCATTGCCGACAGGATGCAGAAGGAGATCACTGCCCTGGCACCACAGCAATGAA
GATCAAGATCATTGCTCCTCCTGAGCGCAAGTACTCCGTGTGGATCGGCGGCTCCATCCTGGCCTCGCTGTCCAC
CTTCCAGCAGATGTGGATCAGCAAGCAGGAGTATGACGAGTCCGGCCCCCTCCATCGTCCACCACAAATGCTTCTTA
GGCGGACTATGACTTAGTTGCGTTACACCCCTTCTTGACAAAACCTAACTTGCGCAGAAAACAAGATGAGATTGG
CATGGCTTTATTTGTTTTTTTTTGTGTTTTTGGTTTTTTTTTTTTTTTTTTGGCTTGACTCAGGATTTAAAACTG
GAACGGTGAAGGTGACAGCAGTCGGTTGGAGCGAGCATCCCCAAAGTTCACAATGTGGCCGAGGACTTTGATTG
CACATTGTTGTTTTTTTTTAATAGTCATTCCAAATATGAGATGCATTGTTACAGGAAGTCCCTTGCCATCCTAAAAG
CCACCCCACTTCTCTCTAAGGAGAATGGCCAGTCCTCTCCCAAGTCCACACAGGGGAGGTGATAGCATTGCTTT
CGTGTAATTATGTAATGCAAAATTTTTTAACTTTCGCCCTTAATACTTTTTTATTTTGTGTTTTATTTTGAATGAT
GAGCCTTCGTGCCCCCCTTCCCCCTTTTTGTCCCCAACTTGAGATGTATGAAGGCTTTTGGTCTCCCTGGGAG
TGGGTGGAGGCAGCCAGGGCTTACCTGTACACTGACTTGAGACCAGTTGAATAAAAGTGCACACCTTA

WO 2004/030615

PCT/US2003/028547

2366/6881
FIGURE 2175

MDDDIAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGI
VTNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKMTQIMFETFNTPAMYVAIQAVLSLYASGRITG
IVMDSGDGVHTVPIYEGYALPHAILRLDLAGRDLDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQ
EMATAASSSSLEKSYELPDGQVITIGNERFRCPEALFQPSFLGMESCGIHETTFNSIMKCDVDIRKDLYANTVLS
GGTMYPGIADRMQKEITALAPSTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHRKCF

WO 2004/030615

PCT/US2003/028547

2367/6881
FIGURE 2176

GCGGAGGGTGCGTGCGGGCCGCGGCAGCCGAACAAAGGAGCAGGGGCGCCGCCGAGGGACCCGCCACCCACCTC
CCGGGGCCGCGCAGCGGCCTCTCGTCTACTGCCACCATGACCGCCAACGGCACAGCCGAGGCGGTGCAGATCCAG
TTCGGCCTCATCAACTGCGGCAACAAGTACCTGACGGCCGAGGCGTTTCGGGTTCAAGGTGAACGCGTCCGCCAGC
AGCCTGAAGAAGAAGCAGATCTGGACGCTGGAGCAGCCCCCTGACGAGGCGGGCAGCGCGGCCGTGTGCCTGCGC
AGCCACCTGGGCGCGCTACCTGGCGGGCGGACAAGGACGGCAACGTGACCTGCGAGCGCGAGGTGCCCGGTCCCCGAC
TGCCGTTTTCCTCATCGTGGCGCACGACGACGGTCGCTGGTCGCTGCAGTCCGAGGCGCACCGGCGCTACTTCGGC
GGCACCGAGGACCGCCTGTCTGTCTTCGCGCAGACGGTGTCCCCCGCCGAGAAGTGGAGCGTGCACATCGCCATG
CACCTCAGGTCAACATCTACAGTGTACCCGTAAGCGCTACGCGCACCTGAGCGCGCGGGCCGGCCGACGAGATC
GCCGTGGACCGCGACGTGCCCTGGGGCGTCGACTCGCTCATCACCTCGCCTTCAGGACCAGCGCTACAGCGTG
CAGACCGCCGACCACCGCTTCCCTGCGCCACGACGGGCGCCTGGTGGCGCGCCCCGAGCCGGCCACTGGCTACACG
CTGGAGTTCCGCTCCGGCAAGGTGGCCTTCCGCGACTGCGAGGGCCGTTACCTGGCGCCGTCCGGGGCCAGCGGC
ACGCTCAAGGCGGGCAAGGCCACCAAGGTGGGCAAGGACGAGCTCTTTGCTCTGGAGCAGAGCTGCGCCCAGGTC
GTGCTGCAGGCGGGCAACGAGAGGAACGTGTCCACGCGCCAGGGTATGGACCTGTCTGCCAATCAGGACGAGGAG
ACCGACCAGGAGACCTTCCAGCTGGAGATCGACCGCGACACCAAAAAGTGTGCCTTCCGTACCCACACGGGCAAG
TACTGGACGCTGACGGCCACCGGGGGCGTGCAGTCCACCGCCTCCAGCAAGAATGCCAGCTGCTACTTTGACATC
GAGTGGCGTGACCGGCGCATCACACTGAGGGCGTCCAATGGCAAGTTTGTGACCTCCAAGAAGAATGGGCAGCTG
GCCGCTCCGTTGGAGACAGCAGGGGACTCAGAGCTTCTCCTCATGAAGCTCATCAACCGCCCCATCATCGTGTTC
CGCGGGGAGCATGGCTTCATCGGCTGCCGCAAGGTCACGGGCACCTTGACGCCAACCGCTCCAGCTATGACGTC
TTCCAGCTGGAGTTCAACGATGGCGCCTACAACATCAAAGACTCCACAGGCAAATACTGGACGGTGGGCAGTGAC
TCCGCGGTACCCAGCAGCGGCGACACTCCTGTGGACTTCTTCTTCGAGTTCTGCGACTATAACAAGGTGGCCATC
AAGGTGGGCGGGCGCTACCTGAAGGGCGACACGCGAGGCGTCTGAAGGCTCGGCGGAAACCGTGGACCCCGCC
TCGCTCTGGGAGTACTAGGGGCCGGCCCGTCCCTTCCCCGCCCTGCCACATGGCGGCTCCTGCCAACCCCTCCCTG
CTAACCCCTTCTCCGCCAGGTGGGCTCCAGGGCGGGAGGCAAGCCCCCTTGCCCTTTCAAACCTGGAAACCCAGAG
AAAACGGTGCCCCACCTGTGCCCCCTATGGACTCCCCACTCTCCCCCTCCGCCCGGGTTCCCTACTCCCCCTCGGG
TCAGCGGCTGCGGCCTGGCCCTGGGAGGGATTTAGATGCCCTGCCCTCTTGCTGTGCCACGGGGCGAGTCTGGC
ACCTCTTTCTTCTGACCTCAGACGGCTCTGAGCCTTATTTCTCTGGAAGCGGCTAAGGGACGGTTGGGGGCTGGG
AGCCCTGGGCGTGTAGTGTAACTGGAATCTTTTGCCCTCTCCAGCCACCTCCTCCAGCCCCCAGGAGAGCTGG
GCACATGTCCCAAGCCTGTCAGTGGCCCTCCCTGGTGCAGTGTCCCCGAAACCCCTGCTTGGGAAGGGAAGCTGT
CGGGAGGGCTAGGACTGACCCTTGTGGTGTTTTTTTGGGTGGTGGCTGGAAACAGCCCCCTCTCCACGTGGGAGA
GGCTCAGCCTGGCTCCCTTCCCTGGAGCGGCAGGGCGTGACGGCCACAGGGTCTGCCGCTGCACGTTCTGCCAA
GGTGGTGGTGGCGGGCGGGTAGGGGTGTGGGGGCCGTCTTCTCCTGTCTCTTTCTTTACCCCTAGCCTGACTG
GAAGCAGAAAATGACCAAATCAGTATTTTTTTAATGAAATATTATTGCTGGAGGCGTCCAGGCAAGCCTGGCT
GTAGTAGCGAGTGATCTGGCGGGGGCGTCTCAGCACCTCCCCAGGGGGTGATCTCAGCCCCCTCTTTCCGTC
CTTCCCGTCCAGCCCCAGCCCTGGGCTGGGCTGCCGACCTGGGCCAGAGCCCCCTGCTGTGATTGGTGTCTCC
TGGGCTCCCCGGGTGGATGAAGCCAGGCGTCCCCCTCCGGGAGCCCTGGGGTGAGCCGCCGGGGCCCCCTGC
TGCCAGCTCCCCGTCCCCAATGCATCTCACTCTGGGTGTCTTGGTCTTTTATTTTTTTGTAAGTGTCAATTG
TATAACTCTAAACGCCCATGATAGTAGCTTCAAACCTGGAAATAGCGAAATAAAATAACTCAGTCTGC

WO 2004/030615

PCT/US2003/028547

2368/6881

FIGURE 2177

MTANGTAEAVQIQFGLINCGNKYLTAFAFGFKVNASASSLKKKQIWTLEQPPDEAGSAAVCLRSHLGRYLAADKD
GNVTCEREVPGPDCRFLIVAHDDGRWSLQSEAHRRYFGGTEDRLSCFAQTVSPA EKWSVHIAMHPQVNIYSVTRK
RYAHL SARP ADEIAVDRDVPWGVD SLITLAFQDQRYSVQTADHRFLRHDGRLVARPEPATGYTLEFRSGKVAFRD
CEGRYLAPSGPSGTLKAGKATKVGKDELFALEQSCAQVVLQAANERNVSTRQGMDLSANQDEETDQETFQLEIDR
DTKKCAFRTHTGKYWTLTATGGVQSTASSKNASCYFDIEWRDRRITLRASNGKFVTSKKNQQLAASVETAGDSEL
FLMKLINRPIIVFRGEHGF IGCRKVTGTLDANRSSYDVFQLEFNDGAYNIKDSTGKYWTVGSDSAVTSSGDTPVD
FFFEFCDYNKVAIKVGGRYLKGDHAGVLKASAETVDPASLWEY

WO 2004/030615

PCT/US2003/028547

2369/6881
FIGURE 2178

CCGAACGCCCGCAGCAGGGTCAGAAGGGAGGTGGCCGGTCTCCGTCGTGACCTCTGACGGTTTCTGAGCGTTGGC
CTTTGGCACGCGCTACACCCTTTTGTCTTGGTTCTGCCATGCCGATGTACCAGGTAAAGCCCTATCACGGGGGCG
GCGCGCCTCTCCGTGTGGAGCTTCCCACCTGCATGTACCGGCTCCCCAACGTGCACGGCAGGAGCTACGGCCCAG
CGCCGGGCGCTGGCCACGTGCAGGAAGAGTCTAACCTGTCTCTGCAAGCTCTTGAGTCCCGCCAAGATGATATTT
TAAAACGTCTGTATGAGTTGAAAGCTGCAGTTGATGGCCTCTCCAAGATGATTCAAACACCAGATGCAGACTTGG
ATGTAACCAACATAATCCAAGCGGATGAGCCCACGACTTTAACCACCAATGCGCTGGACTTGAATTCAGTGCTTG
GGAAGGATTACGGGGCGCTGAAAGACATCGTGATCAACGCAAACCCGGCCTCCCCCTCCCCTCTCCCTGCTTGTGC
TGCACAGGCTGCTCTGTGAGCACTTCAGGGTCCGTGCCACGGTGCACACGCACTCCTCGGTCAAGAGCGTGCCTG
AAAACCTTCTCAAGTGCTTTGGAGAACAGAATAAAAAACAGCCCCGCCAAGACTATCAGCTGGGATTCACTTTAA
TTTGGAAGAATGTGCCGAAGACGCAGATGAAATTCAGCATCCAGACGATGTGCCCCATCGAAGGCGAAGGGAACA
TTGCACGTTTTCTTGTCTCTCTGTTTGGCCAGAAGCATAATGCTGTCAACGCAACCCTTATAGATAGCTGGGTAG
ATATTGCGATTTTTTCAGTTAAAAGAGGGAAGCAGTAAAGAAAAAGCCGCTGTTTTCCGCTCCATGAACTCTGCTC
TTGGGAAGAGCCCTTGGCTCGCTGGGAATGAACTCACCGTAGCAGACGTGGTGCTGTGGTCTGTACTCCAGCAGA
TCGGAGGCTGCAGTGTGACAGTGCCAGCCAATGTGCAGAGGTGGATGAGGTCTTGTAACCTGGCTCCTTTTA
ACACGGCCCTCAAGCTCCTTAAGTGAATTGCCGTAAC TGATTTTAAAGGGTTTAGATTTTAAGAATGGTGCTCTT
TCATGCCTATTATCAGTAAGGGGACTTGATTAGAGTCAGAGTCTTTTATTTAGGCCAGTTGTCAAGTGTCAAT
AAAAGCGCATCATGTAATTTA

WO 2004/030615

PCT/US2003/028547

2370/6881

FIGURE 2179

MPMYQVKPYHGGGAPLRVELPTCMYRLPNVHGRSYGPAPGAGHVQEESENLSLQALESRQDDILKRLYELKAAVDG
LSKMIQTPDADLDVTNIIQADEPTTLTTNALDLNSVLGKDYGALKDIVINANPASPPLSLLVLHRLLCHEFRVLS
TVHTHSSVKSVPENLLKCFGEQNKKQPRQDYQLGFTLIWKNVPKTQMKFSIQTMCPIEGEGNIARFLFSLFGQKH
NAVNATLIDSWVDIAIFQLKEGSSKEKAAVFRSMNSALGKSPWLAGNELTVADVVLWSVLQQIGGCSVTVPANVQ
RWMRSCENLAPFNTALKLLK

WO 2004/030615

PCT/US2003/028547

2371/6881
FIGURE 2180

ATCGGAGTGTGGCAGTGCTGGGCTGGCCGGCGGGCTGGGCTGCGGCCCGCGCGCGGCCGGCGATCGAGGGGGGCA
ACTCCGGGGTCCGCAAGCGCGAAGAGGAGGGCGACGGGGCTGGGGCTGTGGCTGCGCCGGCCATCGACTTTTC
CCGCCGAGGGCCCCGACCCCGAATATGACGAATCTGATGTTCCAGCAGAAATCCAGGTGTTAAAAGAACCCTAC
AACAGCCAACCTTCCCTTTTGAGTTGCAAACCAACTCTTGCTGGTTTCTTTGCTGGAGCACTTGAGCCACGTGC
ATGAACCAAACCCACTTCGTTCAAGACAGGTGTTTAAGCTACTTTGCCAGACGTTTATCAAAATGGGGCTGCTGT
CTTCTTTCACTTGTAGTGACGAGTTTAGCTCATTGAGACTACATCACAAACAGAGCTATTACTCACTTAATGAGGT
CTGCTAAAGAGAGAGTTCGTCAGGATCCTTGTGAGGATATTTCTCGTATCCAGAAAATCAGATCAAGGGAAGTAG
CCTTGGAAGCACAACTTCACGTTACTTAAATGAATTTGAAGAACTTGCCATCTTAGGAAAAGGTGGATACGGAA
GAGTATACAAGGTCAGGAATAAATTAGATGGTCAGTATTATGCAATAAAAAAAATCCTGATTAAGGGTGCAACTA
AAACAGTTTGCATGAAGGTCCTACGGGAAGTGAAGGTGCTGGCAGGTCTTCAGCACCCCAATATTGTTGGCTATC
ACACCGCGTGGATAGAACATGTTTCATGTGATTACGCCACGACAGACAGCTGCCATTGAGTTGCCATCTCTGG
AAGTGCTCTCCGACCAGGAAGAGGACAGAGAGCAATGTGGTGTTAAAAATGATGAAAGTAGCAGCTCATCCATTA
TCTTTGCTGAGCCACCCAGAAAAGAAAACGCTTTGGAGAATCTGACACTGAAAATCAGAATAACAAGTCGG
TGAGTACACCACCAATTTAGTCATAAGAGAATCTGGTGAACCTTGAGTCGACCCTGGAGCTCCAGGAAAATGGCT
TGGCTGGTTTGTCTGCCAGTTCAATTGTGGAACAGCAGCTGCCACTCAGGCGTAATTCACCTAGAGGAGAGTT
TCACATCCACCGAAGAACTTCCGAAGAAAATGTCAACTTTTTGGGTGAGACAGAGGCACAGTACCACCTGATGC
TGCACATCCAGATGCAGCTGTGTGAGCTCTCGCTGTGGGATTGGATAGTCGAGAGAAAACAAGCGGGGGCCGGGAGT
ATGTGGACGAGTCTGCCTGTCTTATGTTATGGCCAATGTTGCAACAAAAATTTTTCAAGAATTGGTAGAAGGTG
TGTTTTACATACATAACATGGGAATTGTGCACCGAGATCTGAAGCCAAGAAATATTTTTCTTCATGGCCCTGATC
AGCAAGTAAAAATAGGAGACTTTGGTCTGGCCTGCACAGACATCCTACAGAAGAACACAGACTGGACCAACAGAA
ACGGGAAGAGAACACCAACACATACGTCCAGAGTGGGTACTTGTCTGTACGCTTCACCCGAACAGTTGGAAGGAT
CTGAGTATGATGCCAAGTCAGATATGTACAGCTTGGGTGTGGTCTCTGCTAGAGCTCTTTCAGCCGTTTGAACAG
AAATGGAGCGAGCAGAAGTTCTAACAGGTTTAAAGAACTGGTCAGTTGCCGAATCCCTCCGTAAAAGGTGTCCAG
TGCAAGCCAAGTATATCCAGCACTTAACGAGAAGGAACCTCATCGCAGAGACCATCTGCCATTACAGCTGCTGCAGA
GTGAACTTTTCCAAAATTCTGGAATGTTAACTCACCTACAGATGAAGATAATAGAGCAAGAAAAAGAAATTG
CAGAACTAAAGAAGCAGCTAAACCTCCTTTCTCAAGACAAAGGGGTGAGGGATGACGGAAAGGATGGGGGCGTGG
GATGAAGTGGACTTAACTTTTAAGGTAGTTAACTGGAATGTAAATTTTTAATCTTTATTAGGGTATAGTTGGTA
CAATGCTTCGTTGTATTTAGTAAGCCTTTACAAGACTTGTTAAAGATGTCAGAGTGCCCCAAGCTGCCGTTCTTT
CCCTTCCTGCCCCACAAGCTCCTTTTCTGAATTTCTACCTAAATATTAACCATATGCCTAGTCTCTGAAACTA
AAAACCTTGGACCTCATCCTCAATTATTTTCTCCTTTCAACTCTGTTGACCCTCTGTCTGGTCTTCTCTAGAAGG
TTCTACCGCAGAAATTGATGTGTGCTCCCTGCCCTCGTCACTGCCCAAGCCGGGCTGCACATACTCACTGGAC
TGTTCCAGTTTTGACAGCTGCCAGTCTTCTGCCCCTTTACACTGCAGCTGAAGTTCATTACCTGAAGGACGCC
TCATCATTTTCACTTGGCTCCAAACCTTCTGCTGCCTCTAAGATAAAAGCTCAACTTCTTAACAGTGTACAGT
GTGCAACTTCCAACCTTTTTATCTGTTCTCTCCACCTTCACTTTAGCGTCATTCCAAAACCACACCCTTGCAAAG
CTTTGTACTCCGCACCCAGATGATCTCCAGGCAGCTCAGATCTCTTCTGCTTTGCCCTGCACTGTTCCCCG
GTACTTCTCTCTTTATTGTAGCACTCAGCTCCCCAGCCAATCTGTACATCCCTCAGAGGCAGCGATCTGATGAAT
TGGTTTTTGAATCCCAGAAAGGTCTGCCATGGAGTTGGCAGTCATCACGGTAGATGGCGTATGATTTTGCTGAA
TTTTAAATAAAATGAAAACCATAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2372/6881
FIGURE 2181

MQGGNSGVRKREEEGDGAGAVAAPPAIDFPAEGPDPEYDESDVPAEQVLKEPLQOPTFPFAVANQLLLVSLEH
LSHVHEPNPLRSRQVFKLLCQTFIKMGLLSSTCSDEFSSRLHNNRAITHLMRSKERVVRQDPCEDISRIQKIR
SREVALEAQTSTRYLNFEELAILGKGGYGRVYKVRNKLDDGQYYAIAKKILIKGATKTVCMKVLREVKVLAGLQHPN
IVGYHTAWIEHVHVIQPRADRAAIELPSLEVLSDQEEDREQCGVKNDSSSSSIIFAEPTPEKEKRFGESDTENQ
NNKSVKYTTNLVIRESGELESTLELQENGLAGLSASSIVEQQLPLRRNSHLEESFTSTEESSSEENVNVLGQTEAQ
YHMLLHIQMQLCELSLWDWIVERNKRGREYVDESACPYVMANVATKIFQELVEGVFYIHNMGIVHRDLKPRNIFL
HGPDQQVKIGDFGLACTDILQKNTDWTNRNGKRTPTHTSRVGTCLYASPEQLEGSEYDAKSDMYSLGVVLELFQ
PFGTEMERAEVLTGLRTGQLPESLRKRCVPQAKYIQHLTRNRSSQRPSAIQLLQSELFQNSGNVNLTLMKII EQ
EKEIAELKKQLNLLSQDKGVRDDGKDGGVG

WO 2004/030615

PCT/US2003/028547

2373/6881
FIGURE 2182

ATGCAGGCCATCAAGTGTGTGGTGGTGGGAGACGGAGCTGTAGGTAAACTTGCCTACTGATCAGTTACACAACC
AATGCATTTTCCTGGAGAATATATCCCTACTGTCTTTGACAATTATTCTGCCAATGTTATGGTAGATGGAAAACCG
GTGAATCTGGGCTTATGGGATACAGCTGGACAAGAAGATTATGACAGATTACGCCCCCTATCCTATCCGCAAACA
GATGTGTTCTTAATTTGCTTTTCCCTTGTGAGTCCTGCATCATTTGAAAATGTCCGTGCAAAGTGGTATCCTGAG
GTGCGGCACCACTGTCCCAACACTCCCATCATCCTAGTGGGAACTAACTTGATCTTAGGGATGATAAAGACACG
ATCGAGAACTGAAGGAGAAGAAGCTGACTCCCATCACCTATCCGCAGGGTCTAGCCATGGCTAAGGAGATTGGT
GCTGTAAAATACCTGGAGTGCTCGGCGCTCACACAGCGAGGCCTCAAGACAGTGTTTGACGAAGCGATCCGAGCA
GTCCTCTGCCCGCCTCCCGTGAAGAAGAGGAAGAGAAAATGCCTGCTGTTGTAA

WO 2004/030615

PCT/US2003/028547

2374/6881
FIGURE 2183

MQAIKCVVVGDAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNLGLWDTAGQEDYDRLRPLSYPQT
DVF LICFSLVSPASFENVRAKWYPEVRHHCPNTP IILVGTKLDLRDDKDTIEKLKEKKLTPITYPQGLAMAKEIG
AVKYLECSALTQRGLKTVFDEAIRAVLCPPPVKKRKRKCLLL

WO 2004/030615

PCT/US2003/028547

2375/6881
FIGURE 2184

GCCGCCGCCGCCATGAACATTTTCCGGCTGACTGGGGACCTGTCCACCTGGCGGCCATCGTCATCCTGCTGCTG
AAGATCTGGAAGACGCGCTCCTGCGCCGGTATTTCTGGGAAAAGCCAGCTTCTGTTTGCACTGGTCTTCACAACT
CGTTACCTGGATCTTTTTACTTCATTTATTTTCATTGTATAACACATCTATGAAGGTTATCTACCTTGCCCTGCTCC
TATGCCACAGTGTACCTGATCTACCTGAAATTTAAGGCAACCTACGATGGAAATCATGATACCTTCCGAGTGGAG
TTTCTGGTGGTCCCTGTGGGAGGCCTCTCATTTTTAGTTAATCACGATTTCTCTCCTCTTGAGATCCTCTGGACC
TTCTCCATCTACCTGGAGTCCGTGGCTATCCTTCCGCAGCTGTTTATGATCAGCAAGACTGGGGAGGCCGAGACC
ATCACCACTTACCTGTTCTTCTGGGCCTCTATCGTGCTTTGTATCTTGTCAACTGGATCTGGCGCTTCTAC
TTTGAGGGCTTCTTTGACCTCATTGCTGTGGTGGCCGGCGTAGTCCAGACCATCCTATACTGTGACTTCTTCTAC
TTGTACATTACAAAAGTACTCAAGGGAAAGAAGCTCAGTTTGCCAGCATAAAGTGCCAAAGACCATCACCAGCATC
TGTCCTTCAGGGTGCTCGGACAGAATTCTTACCACAGCAAAGGCATAAGATGCTTGATACGGAAAAATCAGAACT
TAACTCTTTTGTTCAGATAGTCATCAGTGGCTCTGTAAAAACGCAGAGGAAAAGAGCCAGAAGGTTTCTGTTTA
ATGCATCTTGCCCTTATCTTTTTTTTATTACTGTGTACAAAGATTTTTTTTACACAAAGAACTTAATGCTGTATTAA
TAAATTCAGTGTGTAGCTTCAATTGGGATAGTTCCAAAAGTGAAGATTTTGTGAGGAATAAGTGCAAATTTTTTT
TTTATTTTAAAAAATTCTTTGAACTCTTAAGTCTTTGTGTCTGCAATGAAATTGTACTCCTTGACAGTTGATAG
ATTATGTATTCTTCCATCCCTCAAACCTGCATTCCACTATATTTATTTTTTGGCAAAGATGAGCTGTATTTGTT
TGAAATCTGAGACACTATGTTCAATTGG

WO 2004/030615

PCT/US2003/028547

2376/6881
FIGURE 2185

MNIFRLTGDLSHLAAIVILLKIKWTRSCAGISGKSQLLFALVFTTRYLDLFTSFISLYNTSMKVIYLACSYATV
YLIYLFKFKATYDGNHDTFRVEFLVVPVGGLSFLVNHDFSPLEILWTFSIYLESVAILPQLFMISKGTGEAETITTH
YLFFLGGLYRALYLVNWIWRFYFEGFFDLIAVVAGVVQTILYCDFFLYITKVLKGKKLSLPA

WO 2004/030615

PCT/US2003/028547

2377/6881
FIGURE 2186

ATGAGCGACATCCGCCACTCGCTGCTGCGCCGCGATGCGCTGAGCGCCGCCAAGGAGGTGTTGTACCACCTGGAC
ATCTACTTCAGCAGCCAGCTGCAGAGCGCGCCGCTGCCCATCGTGGACAAGGGCCCCGTGGAGCTGCTGGAGGAG
TTCGTGTTCCAGGTGCCCAAGGAGCGCAGCGCGCAGCCCAAGAGACTGAATTCCTTCAGGAGCTTCAACTTCTT
GAAATCATGTGCAATTATTTCCAGGAGCAAACCAAGGACTCTGTTCCGGCAGATTATTTTTTCATCCCTTTTCAGC
CCTCAAGGGAACAAAGCCGATGACAGCCGGATGAGCTTGTGGGAAAACCTGGTCTCCATGGCGGTGGCTGTGTGT
CGAATCCCGGTGTTGGAGTGTGCTGCCTCCTGGCTTCAGCGGACGCCCCGTGGTTTACTGTGTGAGGTTAGCCAAG
GCCCTTGTAGATGACTACTGCTGTTTGGTGCCGGGATCCATTACAGACGCTGAAGCAGATATTCAGTGCCAGCCCCG
AGATTCTGCTGCCAGTTCATCACCTCCGTTACCGCGCTCTATGACCTGTTCATCAGATGACCTCATTCCACCTATG
GACTTGCTTGAAATGATTGTACCTGGATTTTTGAGGACCCAAGGTTGATTCTCATCACTTTTTTAAATACTCCG
ATTGCGGCCAATCTGCCAATAGGATTCTTAGAGCTCACCCCGCTCGTTGGATTGATCCGCTGGTGCGTGAAGGCA
CCCCTGGCTTATAAAAGGAAAAAGAAGCCCCCTTATCCAATGGCCATGTCAGCAACAAGGTCACAAAGGACCCG
GGCGTGGGGATGGACAGAGACTCCCACCTCTTGTACTCAAACCTCCACCTCAGCGTCTGCAAGTGCTCATGACG
CTGCAGCTGCACCTGACCGAGAAGAATCTGTATGGGCGCCTGGGGCTGATCCTCTTCGACCACATGGTCCCGCTG
GTAGAGGAGATCAACAGGTTGGCGGATGAACTGAACCCCCCAACGCCTCCAGGAGATTGAGCTCTCGCTGGAC
CGGCTGGCGCAGGCTCTGCAGGTGGCCATGGCCTCAGGAGCTCTGCTGTGCACGAGAGATGACCTGAGAACCTTG
TGCTCCAGGCTGCCCCATAATAACCTCCTCCAGCTGGTGATCTCGGGTCCCGTGCAGCAGTCGCCTCACGCCGCG
CTCCCCCGGGGTTCTACCCCCACATCCACACGCCCCGCTGGGCTACGGGGCTGTCCCGGCCACCCCGCCGCC
CACCCCGCCCTGCCACGCACCCCGGCCACACCTTCATCTCCGGCGTGACCTTCCCTTCAGGCCCATCCGCTAG

GCTGGCCCGTGTTGCTTCTGCGCTCTCGCTGGACGAAGCCTTTTCGAGATGGAAGGGGTGGCCGGACTCCCAGA
AGAGAACCTCGGGGAAGGGGTGCGGCAGCCCCCTCCCCGCCGCGCAGAACCGTCTTGGTGTACGGAGTCCAGGTGC
TTCCCACCCGGTGCATTCTTTGACATGCAGATTGGATGGTGGAGGGAAGAGTCCAGCCTCTGCCGAGAGCCTGC
TGCGTGCATTTTTAAAGATGCCGATCCTGGGAGCCTCTGTTCTCTGCGCATTTTCAGACACAGCCTGTGTGGCGA
GGAGTGTGACGGCAGGAGCCACGGGTGCAAGCCCGTGTGTCTGGCCTCTTTCTCGTGAAGACGATGTGTCCCCG
CCAGAAAAAGTGGGCACCTTCTGCAGCCCCGTGAGCTGAGCCCAGGCTGCGTAGTGACCACAAGCTTATGTGCAG
CACTGCTCAGGGAGGCTGTCAGGAATTCCTCCTCACCTCGGAAAGGAACCTTCTCAGTTTTATTGGGGGTGTCTAAA
TTTCTTTTCATATGTTCAAATAAATTTTTCTAAACAGT

WO 2004/030615

PCT/US2003/028547

2378/6881
FIGURE 2187

MSDIRHSLLRDALSAAKEVLYHLDIYFSSQLQSAPLP IVDKGPVELLEEFVFQVPKERSAQP KRLNSLQELQLL
EIMCNYFQEQT KDSVRQIIFSSLFSPQGNKADDSRMSLLGKLVSM AVAVCRIPVLECAASWLQRTPVVYCVRLAK
ALVDDYCCLVPGSIQTLKQIFSASPRFCCQFITSVTALYDLSSDDLIPMDLLEMIVTWIFEDPR LILITFLNTP
IAANLP IGFLELTPLVGLIRWCVKA PLAYKRKKKPPLSNGHVS NKVTKDPGVGM DRDSHLLYSKLHLSVLQV LMT
LQLHLTEKNLYGRLGLILFDH MVPLVEEINRLADELNPLNASQEIELSLDRLAQALQVAMASGALLCTRDDLRTL
CSRLPHNNLLQLVISGPVQQSPHAALPPGFYPHIHTPPLGYGAVPAHPAAHPALPTHPGHTFISGVTFPFRPIR

WO 2004/030615

PCT/US2003/028547

2379/6881
FIGURE 2188

GGCACGAGGAAGCTACTCAGATAAGAGGCTCCAAGAGGACATTTTTGGATGTGAAAAACAATGAGAAGGAGGACA
ACACACATTTACAATCGTCTTAATTTGTACTCAGAAAAAGGATGTGAAGACAATGCACAGGGAATACAATAGTT
TCAGATCTGTGTACAGTTTCCTTTTGCTTCATCTCCTGCAACAATGTAATGAAGACACCATGATATCATTAAAT
TTCACACAAAAGGAAAAATGAGGCTGAAATGGTGTGGGCAAGGCCAGGAATCTGGAGCATCCCTAACCAAGCAGC
AGAGCACCTGGGATAGAGAAAGTGCTCAAGAATGTTCACTTACTGATTACTACAATCAAAAAAGATACGACACT
AATTTACCACATTCTTCTTACTTATTTTATGAGATACTATTCTTCCAAGGTGGAGAAAGTGGAGAAAGTAGAGTG
ACGCAGCTAAGGGAGTAAATCGACCCTCAGCCAACAAGTGGCAAAAGCCTGAAGAAAGTGATCAAGATCACTGAT
GACCCCGCGGCCCATCTCCAAGGGGGCGGGTATCACAACCCCGACGCCACACCACGTATCATTCCGCAAACTCC
CGCGCCTCCACGCAGAACTGGCAAGAGGGAAGCGAGACAGCAGTGAACAGCTGGTACGCAGCACCCACAGCAC
CGCGGCAGCAGCTAGTGCCGACTCCCGCCTAGCTCTTTGACTCTGTTTCGCGGAAGAATGGGGAAACAGTAAGG
TTGCGGCGCCTCCCGCGAGACGAGGTACCTGAGGCTGGCCCCGCAGTCCCCCGCCGACACCAGCACCGGAGCTTCA
CACCCCACTTCCGGGGTCAAGTCACCGCCGGGAATCCTGTGATCGCAGAAAGGTAGTCTCAGGTTCCGCCCTAT
CCAAGTCCCGCCTCCACTGCCTCTCGCCCTGTATCTGTCAACTTCCGGGACGCCGCGCGTCACTAAGCAGCCAAT
CTCCACTTCCGGACTCATCCAGCCCCCTTCTCCACCCCTTTTCAGAGACAGCGCGATTGCGATTTAGGTTTCCGCGC
ATTTAATTGGCGAAGCTGGAGCGCTAGTCTTCGCTGATTGGTGCCGAGAAATCTGCCCCATAGACACCCGCGGGG
CGCACAGTTTCAGTCGTCCGTGGGTTTCCCGCCAGCCGAGTCTTGGAACATAATCATGGTGGACATGATGGACT
TGCCAGGTTCGCGCATCAACGCCGCGCATGCTAGCTCAATTCATCGACAAGCCTGTCTGCTTCGTAGGGAGGCTGG
AAAAGATTTCATCCACCGGAAAAATGTTTATTCTTTTCAGATGGAGAAGGAAAAAATGGAACCATCGAGTTGATGG
AACCCCTTGATGAAGAAATCTCTGGAATTGTGGAAGTGGTTGGAAAGAGTAACCGCCAAGGCCACCATCTTGTTGA
CATCTTATGTCCAGTTTAAAGAAGATAGCCATCCTTTTGATCTTGGACTTTACAATGAAGCTGTGAAAATTATCC
ATGACTTCCCTCAGTTTTATCCTTTAGGGATTGTGCAACATGATGGATCTTGATGGATTTTCATACGATTGTAAA
TGAGCTATATTAAAGTCTATTAAAGGAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2380/6881
FIGURE 2189

MVDMDLPRSRINAGMLAQFIDKPVC FVGRLEKIHPTGKMFILSDGEGKNGTIELMEPLDEEISGIVEVVGRVTA
KATILCTSYVQFKEDSHPFDLGLYNEAVKIIHDFPQFYPLGIVQHD

WO 2004/030615

PCT/US2003/028547

2381/6881
FIGURE 2190

CAACCGAATGGTCAACCATTTTATTGCTGAGCTCAAGCGCAAGCATAAGAAGGACATCAGTGAGAGCAAGAGAGC
TGTAAGATGCCTCCGTACTGCTTGTGAACATGCTAAGCGTACTCTCTCTTCCAGCACCCAAGTCAGTATTGAGAT
CGATTCTCTCTATGTAGGAATTGACTTCTATACCTCCATTACCTGTGCCCAGTTTGAAGAATTGAATGCCTGGGG
GATTCCCTGTTGGTGGAGCTCCTCCTTCTGGTGGTGCTTCCTTAGGGCCCACCATCGAAGAGGTTGATTAAGCCA
ACCCAAGTATAGATGTAGCATTGTTCCACACATTTAAACATTTGAAGGACCTAAATTTGTAGCAAATTCTGTGG
CAGTTTTAAAAAGTTAAGCTGCTATAGTAAGTTACTGGGCATTCTCAATACTTGAATATGGAACATATGCACAGG
GGAAGGAAATAACATTGCACTTTATAAACACTGTATTGTAAGTGGAATGCAATGTCTTAAATAAACTATTTA
AAATTGGCACCAT

WO 2004/030615

PCT/US2003/028547

2382/6881
FIGURE 2191

CAGCCATCCTGTCTGGAGACAAGTCTGAAAATGTTCAAGATTGCTGCTCTTGGACGTCACCTCCTTTCCCTTG
GTATTGAACTGCTAGTGGAGTCATGACCATCCTCATCAACTGTAATACCACCATTCTACCAAGCAGACACAGA
CCTTCATTACCTATTCTGACAACCAGCCTGGTGTGCTTATTGAGGTTTATGAAGGTGAGCGTGCCATGTCCAAGG
ATAACAACCTGCTTGGCAAGTTTGAATTCACGGGCATACCTCCTGAACCCCAAGGTGTTCTCAGATTGAAGTCA
CTTTTGACATTGATGCCAATGGTATCCTCAGTGTCTCTGCTGTGGACAAAAGTACAGGAAAAGAGAATAAAATTA
CTATCACTAATAATAAGGGCCATTTGAGCAAGGAAGACATTGAACGTATGGTCCAGGAAGCTGAGAATTAAAAAAG
CTGAAGATGAGAAGCAGAGGGACAAGGCGTCATCCAAGAATTCACCTGAGTCCTATGCATTCAACATGAAAGCAA
CTGTGGAAGATGAGAACTTCAAGACAAGATTAATGATGAGGACAAACAGAAGATTCTGGACAGGTGTAATGAAA
TTATCAACTGGCACAATAAGAATCGGACTGCCAAGAAGGAAGAATTTGAACATCAGCAGAAAGAGCTGGAGGAAC
TTTGCAACCCAATCATCACCAGCTGTACCAGAGTGCAGAAGGCATGCCAGGAAGAATGCCTGGGGGATTCCCTG
TTGGTGGAGCTCCTCCTTCTGGTGGTGCTTCCTTAGGGCCCACCATCGAAGAGGTTGATTAAGCCAACCCAAGTA
TAGATGTAGCATTGTTCCACACATTTAAAACATTTGAAGGACCTAAATTTGTAGCAAATTCGTGGCAGTTTTAA
AAAGTTAAGCTGCTATAGTAAGTTACTGGGCATTCTCAATACTTGAATATGGAACATATGCACAGGGGAAGGAAA
TAACATTGCACTTTATAAACACTGTATTGTAAGTGGAAAATGCAATGTCTTAAATAAACTATTTAAAAATTGGCA
CCAT

WO 2004/030615

PCT/US2003/028547

2383/6881
FIGURE 2192

MTILINCNTTIPTKQTQTFITYSDNQPGVLIQVYEGERAMSKDNNLLGKFEFTGIPPEPQGVPQIEVTFDIDANG
ILSVSAVDKSTGKENKIIITNNKGHLSKEDIERMVQEAEN

WO 2004/030615

PCT/US2003/028547

2384/6881
FIGURE 2193

CCGTAGTGTCTCATTGCAGATAATTTTAGCTTAGGGCCTGGTGGCTAGGTCGGTTCTCTCCTTTCCAGTCGGAG
ACCTCTGCCGCAAACATGCTCCGCCAGATCATCGGTCAAGCCAAGAAGCATCCAAGCTTGATCCCCCTCTTTGTA
TTTATTGGAAGCTGGAGCTACTGGAGCAACACTGTATCTCTTGCGTCTGGCATTGTTCAATCCAGATGTTTGTTGG
GACAGAAATAACCCAGAGCCCTGGAACAAACTGGGTCCCAATGATCAATACAAGTTCTACTCAGTGAATGTGGAT
TACAGCAAGCTGAAGAAGGAACGTCCAGATTTCTAAATGAAATGTTTCACTATAACGCTGCTTTAGAATGAAGGT
CTTCCAGAAGCCACATCCGCACAATTTTCCACTTAACCAGGAAATATTTCTCCTCTAAATGCATGAAATCATGTT
GGAGATCTCTATTGTAATCTCTATTGGAGATTACAATGATTAAATCAATAAATAACTGAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2385/6881
FIGURE 2194

MLRQIIGQAKKHPSLIPLFVFIGTGATGATLYLLRLALFNPDVCWDRNNPEPWNLGPNDQYKFYSVNVVDYSKLK
KERPDF

WO 2004/030615

PCT/US2003/028547

2386/6881
FIGURE 2195

GCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCTCTAGG
CCTTTTAGAAAACATGGAGTTGTTTCCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAGACATC
AAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACAATGTT
ACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATGTGCGT
ATTGAGCACATTAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGTGTGAAGGAAAATGATCAGAAAAAGAAA
GAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGAGCTGCTGGAACCTATTCCCTATGAATTC
ATGGCATAATAGGTGTT

WO 2004/030615

PCT/US2003/028547

2387/6881
FIGURE 2196

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTVQKGMPhKCYHGKTGRVYNVTQHAVGIV
VnKQVKGKILAKRINVRIEHIKHSKSRDSFLKRVKENDQKKKEAKEKGTWVQLKRQPELLEPIPYEFMA

WO 2004/030615

PCT/US2003/028547

2388/6881
FIGURE 2197

GCTCGGGCGCGGGGCGTTCTTGGTGCGCCGGGCGGTGGTGAGTCCGGGCTCCCGTGGCCGCGTGCTGGGAGGAGA
CTGGAGCCCCGGTTAGGAAGAATGGAGTTGGCGACTCGCTACCAGATCCCTAAAGAAGTGGCTGACATCTTTAACG
CCCCAGTGATGATGAAGAGTTTGTGGCTTCCGAGATGATGTTCCCATGGAAACCCTCTCGTCAGAGGAGAGCT
GCGATAGTTTTGACTCACTAGAGTCAGGGAAAACAGCAGGATGTGCGCTTTCATTCCAAATACTTCACAGAAGAGC
TAAGAAGAATTTTTATAGAGGACACTGACTCAGAGACTGAGGATTTTGCAGGATTTACGCAGAGTGATCTGAATG
GAAAGACTAACCCAGAAGTAATGGTCGTGGAGTCAGATTTGAGTGATGATGGCAAAGCATCTTTGGTGAGCGAGG
AAGAGGAAGATGAAGAAGAAGATAAGGCTACCCCTAGAAGAAGCAGGTCTAGAAGAAGTAGTATTGGTCTTTCGAG
TAGCCTTTCAGTTCCCCACCAAGAAGCTGGCCAAACAAACCAGATAAAAACAGTTCTTCCGAGCAGTTGTTTTCTA
GCGCACGCTTACAGAATGAGAAAAAAACAATTCTTGAAAGAAAGAAAGACTGTAGACAGGTGATACAAAGGGAAG
ATTCTACCTCTGAGTCTGAGGATGACTCTCGGGATGAGAGCCAGGAGAGTTTCTGCTGAAAAGGACCA
TGAACATCAAGGAGAACAAGCCATGCTTGCCAGTTATTGGCGGAATTGAACTCGATGCCAGATTTCTTCCAG
TACGAACCCCAACCTCAGCTTCTAGGAAGAAGACAGTGAGGCGGGCCTTCTCGGAGGGACAGATCACGCGGCGTA
TGAACCCCAACCCGAGTGCGCGGCCCTCTGAGAAGTTTGTCTAGAGAACTTCACTGTCTCAGCCGCTAAATTTG
CGGAAGAGTTTTACAGCTCCGAAGAAGGAAGACAATTGGGGGGAAATGCCGGGAGTACAGACGACGTACCCGTA
TATCTTCTTTTCGGCCAGTGGAGGATATCACCGAAGAGGACTTAGAAAATGTTGCCATAACTGTTTCGAGATAAAA
TCTATGATAAAGTTCTGGGTAAACAGTGCCATCAGTGTCGACAAAAGACCATCGACACCAAGACAGTGTGTGCGA
ACCAGGGTTGCTGTGGTGTGCGAGGACAGTTCTGTGGACCATGCCTGCGGAACCGCTATGGGGAGGATGTCAGAT
CGGCATTGCTGGACCCGATTGGGTGTGTCCCCCTGTCTGGGATCTGCAATTGCAGCTACTGTCGGAAGCGTG
ACGGCCGCTGTGCCACAGGAATCCTCATTCTTGCCCAAGTTTTATGGTTATGACAATGTTAAGGAATATCTGG
AGAGCTTACAAAAGGAGCTGGTAGAAGACAATTAAGAGGAAAACAAACAGAACCAGCCACCTCACCATAGAGTAC
TCCAACAAGACATGCATACCATTGGTGCCTAAGATTATTAAACTTGACTGAACAAAAGGGGACCATCAACATT
GTAGACACTGGACACTGGAGGCCTTACAGAGTGCTAGCCTCTTCCTTCAGGACTCACCTGGGGCCTGCTGCTTTT
ATATTTTGAAAGAGTTTAAGGGCTAATAATTTAATTTGTTGTTTGTAAATAAATAATCTCCGTTCTTTCCGGC
TGCATTGCTTTTGCATGTTACATATGATGTACTTTTATGATGTACTTTTTTTTTTTTGGAGATGGAGTCTTGTTT
TGTTGCCCAGGAGGAGTGCAAGTGGTGCAACCTCGGCTCACTGCAACCTTTGCCTCCTAGGTTCAAGTGATTCTC
CTACCTCCTGAGTAACTGGGATTACAGTCGTGTGCCACCACGCTCAGCCCTGAGTTAGTTTCTAGTATTTTTTTC
TGACTTTCACCTAAGGATAGCGTTGAAAAAGAATGCACGTGTGAGTTACTAAAAAGTTAGAATAATGTGCATG
GGAACAGTGCAGCAACATGCTAGAAAATCCTCACTGCACTCCAGCAGAGGCTAGAGGAATGCCAGTGTTACCTTA
CGTTCTAGAAAGCAGAGCCACTCCAGCCAGAACCCATTTTGCAGTCTTCTCTTCGCTCTTCAGCCTGAAGGTCCA
GATGTAGCTGGGGCCTCTCAGTTTGGTTCTATACACAGGGCACTCGTAGGTCTGTTTGGTTTCTTGTCTGTCCAC
GGGGGTGGCTTTTGCAGAGATGACCGGCATAGGGCATGCCAGCTCCTTGAGACGGGCTTCAACAATGGTTCTGTC
TTGGGTGTCCAGCGGGCGCTATGGCAAAAACACAGCGGTTGCAATTGTGTGGCAGCTTGCTACTAATGATAAT
GATCAAGTAAGTTGTTGATGCAATAAACATTCAACATTCTGGTTTTGTCTAT

WO 2004/030615

PCT/US2003/028547

2389/6881
FIGURE 2198

CTTTTTCGCAACGGGTTT GCCGCCAGAACACAGGTGTCGTGAAAAC TACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATT CAGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCCGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTC
AAGTATGCCITGGGTCCTTGGATAAACTGAAAAGCTGAGCGTGAACTGGTATCACCATTGATATCTCCTTGTGGAA
TTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGTCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATAATTGTCGGTGTAAACAAA
ATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAATCAGCACTTACATTAAGA
AAATTGGCTACAACCCCGACACAGTAGCATTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAA
GTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACACGCTGCTTG
AGGCTCTGGACTGCATCCTACCACCAACTCATCCAAGTACCAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACA
AAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCCGGTATGGTGGTCACT
TTGCTCCAGTCAACGTTACAACGGAAGTAAATCTGTGCAATGCACCATGAAGCTTTGAGTGAAGCTCTTCTCTG
GGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTGCTCGTGGCAACGTCGCTGGTGACAGCA
AAAATGACCCACCAATGGAAGCAGCGGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCA
CCGGCTATGCCCCGTGATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTG
ATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGG
TTCTGGCAAGCCCATGTGTGTGAGAGCTTCTCAGACTATCCACCTTTGGGTCGCTTTGCTGTTTCGTGATATGA
GACAGACAGTTGCGGTGGGTGTCTATCAAAGCAGTGGAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTG
CCCAGAAAGCTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAGAA
TGGTCTCAGAACTGTTTGTTCATTGGCCATTTAAGTTTAGTAGTAAAAGACTGGTTAATGATAACAATGCATC
GTAAAACCTTCAGAAGGAAAGGAGAATGTTTGTGGACCACTTTGGTTTTCTTTTTTGCCTGTGGCAGTTTTAAG
TTATTAGTTTTTAAATCAGTACTTTTTAATGGAACAACCTGGACCAAAAATTTGTCACAGAATTTTGAGACCCA
TT

WO 2004/030615

PCT/US2003/028547

2390/6881
FIGURE 2199

MLEPSANMPWFKGWKVTRKDGNASGTTILLEALDCILPPTHPTDKPLRLPLQDVYKIGGIGTVPVGRVETGVLKPG
MVVTFAPVNVTTTEVKSVEMHHEALSEALPGDNVGFNVKNVSVKDVRRGNVAGDSKNDPPMEAAGFTAQVIILNHP
GQISTGYAPVLDCHTAHIACKFAELKEKIDRRSGKKLEDGPKFLKSGDAAIVDMVPGKPMCYESFSDYPPLGRFA
VRDMRQTVAVGVIAVDKKAAGAGKVTKSAQKAQKAK

WO 2004/030615

PCT/US2003/028547

2391/6881
FIGURE 2200

GAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGAT
TACAGGGACATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATA
ATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
TCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTGTGTTGTTGGAATGGTG
ACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAAGTCACCCGTAAGGATGGCAATGCCA
GTGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCATCCAAGCCCTTGCGCCTGC
CTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTCTCAAAC
CCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTACAACGGAAGTAAAAATCTGTGCGAAATGCACCATGAAGCTT
TGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTGTCGTGGCA
ACGTCGCTGGTGACAGCAAAAATGACCCACCAATGGAGCAGCGGGCTTCACTGCTCAGGTGATTATCCTGAACC
ATCCAGGCCAAATAAGCACC GGCTATGCCCTGTATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTG
AGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAATATGGTTTCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAG
ACTATCCACCTTTGGGTGCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGG
ACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCCAGAAAGCTCAGAAGGCTAAATGAATATTATCCC
TAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAAGAA

WO 2004/030615

PCT/US2003/028547

2392/6881
FIGURE 2201

MVTTCSQVLTCLGTMLLEALDCILPPTRPTDKPLHLPLQDVYKIGGIGSVFVGRVETGVLKPGMVVTFAPVNV
TEVKSVMHHEALSEALPGDNVGFNVKNVSVKDVRHGNVAGDSKNDPPMEAAGFTAQVILNHPGQISTGYAPVL
DCHTAHIACKFAELKEKIDHRSGNMVPGKPMCVESFSDYPSLGCFVRDMRQIVTVGVKAVDKKTAGAGKVTKS
AQKAQKAK

WO 2004/030615

PCT/US2003/028547

2393/6881
FIGURE 2202

TATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCC
TTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGG
AAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGATT
ACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCC
AAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACATAATTGTCGGTGTAAAC
AAAATGGATTCCACTGAGCCACCCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAATCAGCACTTACATTA
AGAAAATTGGCTACAACCCCGACACAGTAGCATTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGC
CAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACACGCTGC
TTGAGGGCTCCAGTCAACGTTACAACGGAAGTAAAAATCTGTGCAAATGCACCATGAAGCTTTGAGTGAAGCTCTT
CCTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTTCGTTCGTGGCAACGTCGCTGGTGAC
AGCAAAAATGACCCACCAATGGAAGCAGCGGGCTTCACTGCTCAGG

WO 2004/030615

PCT/US2003/028547

2394/6881
FIGURE 2203

GTGAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGA
TTCAGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATT
TGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCG
TGAACGTGGTATCACCATTGATATCTCCTTGTGGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGT
GTGAA

WO 2004/030615

PCT/US2003/028547

2395/6881
FIGURE 2204

GAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATT
CAGGCAAGTCCACCCTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTG
AGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTG
AACGTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCC
GGGACATCTCAGGCTGACTGTGCTGTCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGG

WO 2004/030615

PCT/US2003/028547

2396/6881
FIGURE 2205

CTCTCTCCGGTCCATGCCTCCAAGATGACAAAGAAAAGAAGGAACAACGTTTCGTGCCAAAAAGGGCCGCGGCCAC
GTGCAGCCTATTCGCTGCACTAACTGTGCCCCGATGCGTGCCCAAGGACAACGCCATTAAGAAATTCGTCATTCTGA
AACATAGTGGAGGCTGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TGTGTGAAGCTACATTACTGTGTGAGTTGTGTAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGC
AAGGACCGAACACCCCCACCCGATTTAGACCTGCGGGTGCTGCCGCACGTCCCCACCAAAGCCCATGTAAGGA
GCTGAGTTCTTAAAGACTGAAGACAGACTATTCTCTGGAGAAAAATAAAATGGACATTGTACTTAAAAAAAACA
AAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2397/6881

FIGURE 2206

CCGTGATGTGGCGCCTGCACAXTCCTTTCCCTTTTCGGATTCCCGACGCTGTGGTTGCTGTAAGGGGTCCTCCCTG
CGCCACACGGCCGTCGCCATGGTGAAGCTGAGCAAAGAGGCCAAGCAGAGACTACAGCAGCTCTTCAAGGGGAGC
CAGTTTGCCATTCGCTGGGGCTTTATCCCTCTTGTGATTTACCTGGGATTTAAGAGGGGTGCAGATCCCGGAATG
CCTGAACCAACTGTTTTGAGCCTACTTTGGGGATTAAAGGATTATTTGGTCTTCTGGATTTGGAGGCAATCAGCGG
ACAGCATGGAAGATGTGTGCTCTGGCTCGGATAAGAGATGGGACATCATTAGTCACTAGTTGGATGGCACAAGG
CTCTTCACAGACGCATCTGTAGCAGAGTGGAACCTTGTAATACTTATGATAGAATGTATCAGAATAAATGTTTTT
AACAGTGTA

WO 2004/030615

PCT/US2003/028547

2398/6881
FIGURE 2207

MVKLSKEAKQRLQQLFKGSQFAIRWGFIPLVIIYLGFKRGADPGMPEPTVLSLLWG

WO 2004/030615

PCT/US2003/028547

2399/6881
FIGURE 2208A

GGACGTCCGGCTTCGGAGCGGGAGTGTTCGTTGTGCCAGCGACTAAAAAGAGAATTAAATATCGGTGATGTTGAG
AAAGGCAAGAAGATTTTTATTATGAAGTGTTCCCACTGCCACACCGTTGAAAAGGGAGGCAAGCACAAGACTGGG
CCAAATCTCCATGGTCTCTTTGGGCGGAAGACAGGTCAGGCCCCCTGGATACTCTTACACAGCCGCCAATAAGAAC
AAAGGCATCATCTGGGAGAGGATACACTGATGGAGTATTTGGAGAATCCCAAGAAGTACATCCCTGGAACAAAA
ATGATCTTTGTCGGCATTAGAAGAAGGAAGAAAGGGCAGACTTAATAGCTTATCTCAAAAAAGCTACTAATGAG
TAATAAATTGGCCACTGCCTTATTTATTACAAAACAGAAATGTCTCATGACTTTTTTATGTGTACCATCCTTTAAT
AGATCTCATAACACAGAATTCAGATCATGAATGACTGACAGAATATTTTGTGGGAGTCTGATTTAAACTAA
GACTGGCTTGTGGTTAAATGAATATGTTCACTTTTGAATTTTAAATAGTAACTCCAATTCAGTAAATGGTATCAC
TGTTTACCCCTTTTAAAGATATGATTAGACTTCGTTAGTAATGTTCAACTTTTACAAAAGATGGTGAGTGCCATC
TTAAACTTACTGGAGATTGGTTTTATTTAGATTTATATAACTGGTTATGTGAATATATTTAAATACTGGGGA
AATTGCTTCACTGTCTTAGAACCAAGCAAGATTCACCTGTGTTTTGTGTTTCACTTTGCCTCTTAAAGGCA
AGGGTTGAAGATAAATAAGGTTGCAATGTTCTATAGTTTTGGCCTTAACTATGCCAATCTAATTATAATCCCTGT
ATTTAAATGGTTTTCTTTTACTTATTGAAAGGCATTTTAGTGTTGTTTTATGTGTAATATTAAAGATTATTCAACA
CCTCTCACATCTTACAGATCTATAAGGTCACATGCTTTTAAATAGTAGCAAGTTAACTTCACTCTTGAATTCT
TTACAATCTAAGTCAAATAAGTTATAATTAGGATTGTCTTTAAACAGCCATTCAGAAACAAAAGTGTAGAAT
GTGTATTTGATTGGGAATGGTGCTTTTGCCAACTTAAAGGATTAAAGTAACGGAGATATACACAAATTTAAAA
TTATGTGTGATCACAAGACTAAAGATAATTAAAAAGAAAACACAGATCATGACTTTTTGACTGTGCTTGATTTC
ATGACTGATGCACAAATTTAATGATTAAAAAGTGACAGGAGCCCTAAATGTGAGTGCAGCAGCCCTAAATGTGAG
TGCAGCAGTGTTAACCAGTCATGGTGCTAGATTGTTTACTTGGTTTTCTAGGACTGCCTCACTAGATAAAGT
TCACTAATTGACTCTTAGTTTTCTTGCTCAGATTGAGAACTGCAGCATTATGCCAGACATGGACAGAGGAATGC
CTGTGGTCATAGTTTTGTGATGTGTAAACAGTGTATAATTACATACTGAATTATTTCACTAGTCTGTGCCATA
CACATTTAGAGTAGTCCTTGGAGATTTTATGGAGATGGTGAGCACAAGGTAAGTCATAAAGAATAATGAGAAAAAT
AAATCTATGCTGGTGACGCTGAGAACTGTATCTTTGTGGGACAGTGAGAAGACTGAGAAGATGTGAATCCATGGT
CTCAAAGGTGATAGGGACGATTAGATAGGTGTTTTAAGGCCTGAAAGCAATTTATAACATATGAGTCTTATTTTT
ATTTATAGAAATGTGGAAGCTTGCTGTAATTCATATTTGAAGTCTAGTCTGAGTTCGGTGGGGAATTTAAAA
ATGCATCCTGGAATCCTTTAAAGATTTTCAAGCTTTGAAAGGCCTTGAGCAGAGGACTTGGTGACTGTATAAAG
TTAGTGGTATTCAGGGACAGTGTAGCAAGTAGCTTACAAGGGGACAATTCCTGGACTAATGAGAAAGACCTGAAGT
GAAGGCTAGAGAGTTGATTTTTTTTTTTTTTGGCATCCTGGAATGATACAGGAAACATATTAGATAGATACAG
AAATGTGTTCAACCTTCCATCTTGGCTAGTTGTGGCGTTTAGTTGTTTTTGGAGACATGGTACCGCTGTGTGCG
CAAGGCTGGAGTGCAGTGGTGCGATCTCGGCTGGCTGCAGCCTCTATTTCCAGGCTCAAGCGATTCTCTCACTT
CAGCTTCCCAAGTAGCTGGGACTGCGGGTGTTGCGCCACCATTGCCAGCTAATTTTTTGTAGAGATGGAGTTTTG
CCATGTGGTCCCAGGCTGGTCTCAAACCTCCTGAGCTCAAGCAATCCGTCCACTTGCCTTGGCTCCCCAAGTGCT
GGGATTGCAGGCGTGAGCCACCAGGCCCTGCTGGTTTTTCAAATTCAGAAATCTTATTATTTAACCAGAAATGTA
TCAGCCCAGTAGTAACCTTAGGTTAATTTTTTTTTTTCAGGTTTTAAATTTTTTCTCATTTATTTTTTCTGAGACGGAG
TTTCGCCCTTTTCGCCAGGCTGAGTACAGTGGTGCAATCTCACTGCAACCTCCGCCTTCCAGTTGCAAGTGATT
CTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTGAGGCACCCGCCACCACGCCTGGCTAATTTTTGTATTTTTAG
TGGAGATGGTGTTCACCATGTTGGCCAGACTGGTCTTGGACTCCTGACCTCGTGATCCACCCACCTTGGCCTCC
CAAAGTTCTAGGATTACAGGTGTGAGCCACCACGTCCGGCCAATTTTTCTCATTTCTATGCCTCCTATATTAAGG
TCTGTGTTGGCACAGATGAGTAAGTCCATGTTCTAGGTGAGTTATACCCAAGCACTTCTGGTGGTTTTAAATGT
GATTCGTGTAACCTTTTTATTTTTATTTTTTTTGGAGATAATTTCACTCTTGTGCCCAGGCTGGAGTGAATGGCGT
GATCGCTGCTCACCAGCAACCTCCGCCTTCCAGGTTCAAGCGATTCTCCTGACTCAGCCTCTCAAGTAGCTGGGAT
TACAAGCATGCGCCACCATGCCAGCTTATTTTTGTGTTTTTAGTAGAGACAGGGTTTTCTCCATGCTGGACAGGCT
GGTCTTGAACCTCCCGACGTGCGGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCAC
CACGCCTGGCCAATTATGTAATTTTTTAAAAAGGACATTTCTATCAGGGATATATACCTTCAGAAATAAGGAAAT
AGGGGAAAAAAGAGCACTATAAACCACATGTTTTTCAATTTCTAGTGCTTCGCTGTAAGTGGCTAGGTTGGTAGAA
TCAAAAACAAGGGCCAGATGTATTTAAGGGGTATTGAGATGCCACCTACATGCTTATTTGTCTAGAACAGTGCT
GTCTAATAGAACTTTCTGTGACGATGGATATTTGTAGACTTTTGTGTCCAGTGTGGTAGCCACTAACCACATG
TGGCTGTAAAGCCCTTGAAATATAGCTAGTGTGACTAGAAAGTATTTTATTTTAAATTTACATAGGCACAAGTGG

WO 2004/030615

PCT/US2003/028547

2400/6881
FIGURE 2208B

CTAGTGGCTACTGTATTGACATTCTGGGTCTAGGACTAGAACCAGTGGTCTGTAACAAAAGTACTTTCTCTTTAC
TCTATTAAATCTAGAATTAGCCGGGCATGGTCGCTCATGCCTGTGGTCCCAGCACTTTGGGAGGCCAAGGCAGGC
AGATCACTTGAGGTCGGGCGTTTGAGACCAGCCTGGTCAACATGGCGAAACCCTGTCTCTACAAAAAACATAAAA
GTTAGCCAGGTGTGGTGGTGGGCACCTGTAGTCTCAGCTACTTGGGAGGCTGAGGCACAAGAATCACTTGAACCT
GGGAGGTGGAGGTTGCAGTGAGCCAGGATTGTGCCACTGCACTCAAGCCTGGGTGACGAGTGAAACTGTCTCCAA
AAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2401/6881
FIGURE 2209

MGDVEKGKKIFIMKCSQCHTVEKGGKHKTGPNLHGLFGRKTGQAPGYSYTAANKNKGI IWGEDTLMEYLENPKKY
IPGTMIFVGIKKKEERADLIAYLK KATNE

WO 2004/030615

PCT/US2003/028547

2402/6881
FIGURE 2210

AGTAGCAGCAGCGCCGGGTCCCGTGCGGAGGTGCTCCTCGCAGAGTTGTTTCTCGAGCAGCGGCAGTTCTCACTA
CAGCGCCAGGACGAGTCCGGTTTCGTGTTTCGTCCGCGGAGATCTCTCTCATCTCGCTCGGCTGCGGGAAATCGGGC
TGAAGCGACTGAGTCCGCGATGGAGAGAGAAAAGGAACAGTTCCGTAAGCTCTTTATTGGTGGCTTAAGCTTTGA
AACCACAGAAGAAAGTTTGAGGAACACTACGAACAATGGGGAAAGCTTACAGACTGTGTGGTAATGAGGGATCC
TGCAAGCAAAAGATCAAGAGGATTTGGTTTTGTAACTTTTTTCATCCATGGCTGAGGTTGATGCTGCCATGGCTGC
AAGACCTCATTCAATTGATGGGAGAGTAGTTGAGCCAAAACGTGCTGTAGCAAGAGAGGAATCTGGAAAACCAGG
GGCTCATGTAAGTGTGAAGAAGCTGTTTGTGGCGGAATTAAGAAGATACTGAGGAACATCACCTTAGAGATTA
CTTTGAGGAATATGGAAAAATTGATACCATTTAGATAATTACTGATAGGCAGTCTGGAAAGAAAAGAGGCTTTGG
CTTTGTTACTTTTTGATGACCATGATCCTGTGGATAAAATCGTATTGCAGAAATACCATACCATCAATGGTCATAA
TGCAGAAGTAAGAAAGGCTTTGTCTAGACAAGAAATGCAGGAAGTTCAGAGTTCTAGGAGTGGAAGAGGAGGCAA
CTTTGGCTTTGGGGATTACGTTGGTGGCGGTGGAAATTCGGACCAGGACCAGGAAGTAACCTTTAGAGGAGGATC
TGATGGATATGGCAGTGGACGTGGATTTGGGGATGGCTATAATGGGTATGGAGGAGGACCTGGAGGTGGCAATTT
TGGAGGTAGCCCCGGTTATGGAGGAGGAAGAGGAGGATATGGTGGTGGAGGACCTGGATATGGCAACCAGGGTGG
GGGCTACGGAGGTGGTTATGACAACATATGGAGGAGGAATTATGGAAGTGGAAATTACAATGATTTTGGAATTA
TAACCAGCAACCTTCTAACTACGGTCCAATGAAGAGTGGAACTTTGGTGGTAGCAGGAACATGGGGGGACCATA
TGGTGGAGGAACTATGGTCCAGGAGGCAGTGGAGGAAGTGGGGGTTATGGTGGGAGGAGCCGATACTGAGCTTC
TTCTATTTGCCATGGGCTTCACTGTATAAATAGGAGAGGATGAGAGCCCAGAGGTAACAGAACAGCTTCAGGTT
ATCGAAATAACAATGTTAAGGAACTCTTATCTCAGTCATGCATAAATATGCAGTGATATGGCAGAAGACACCAG
AGCAGATGCAGAGAGCCATTTGTGAATGGATTGGATTATTTAATAACATTACCTTACTGTGGAGGAAGGATTGT
AAAAAAAAATGCCTTTGAGACAGTTTCTTAGCTTTTTAATTGTTGTTTCTTTCTAGTGGTCTTTGTAAGAGTGTA
GAAGCATTCTTTCTTTGATAATGTTAAATTTGTAAGTTTCAGGTGACATGTGAAACCTTTTTTAAGATTTTCTC
AAAGTTTTGAAAAGCTATTAGCCAGGATCATGGTGTAAATAAGACATAACGTTTTTCCTTTAAAAAAATTTAAGTG
CGTGTGTAGAGTTAAGAAGCTGTTGTACATTTATGATTTAATAAAATAATTCTAAAGGAAAAAA

WO 2004/030615

PCT/US2003/028547

2403/6881

FIGURE 2211

MEREKEQFRKLFIGGLSFETTEESLRNYEQWGKLTDCVVMRDPASKRSRGFGFVTFSSMAEVDAAAMAARPHSID
GRVVEPKRAVAREESGKPGAHVTVKKLFVGGIKEDTEEHHLRDYFEEYGKIDTIEIITDRQSGKKRGFGFVTFDD
HDPVDKIVLQKYHTINGHNAEVRKALSRQEMQEVQSSRSGRGGNFGFGDSRGGGGNFGPGPGSNFRGGSDGYGSG
RGFGDGYNGYGGGPGGGNFGGSPGYGGGRGGYGGGGPGYGNQGGGYGGGYDNYGGGNYGSGNYNDFGNYNQQPSN
YGPMKSGNFGGSRNMGGPYGGGNYGPGSGGSGGYGGRSRY

WO 2004/030615

PCT/US2003/028547

2404/6881
FIGURE 2212

AGTAGCAGCAGCGCCGGGTCCCGTGCGGAGGTGCTCCTCGCAGAGTTGTTTCTCGAGCAGCGGCAGTTCTCACTA
CAGCGCCAGGACGAGTCCGGTTCGTGTTTCGTCCGCGGAGATCTCTCTCATCTCGCTCGGCTGCGGGAAATCGGGC
TGAAGCGACTGAGTCCGCGCATGGAGAGAACTTTAGAACTGTTTCTTTGGAGAGGAAAAAGAGAGAAAAGGAACA
GTTCCGTAAGCTCTTTATTGGTGGCTTAAGCTTTGAAACACAGAAGAAAGTTTGAGGAAGTACTACGAACAATG
GGGAAAGCTTACAGACTGTGTGGTAATGAGGGATCCTGCAAGCAAAAGATCAAGAGGATTTGGTTTTGTAACTTT
TTCATCCATGGCTGAGGTTGATGCTGCCATGGCTGCAAGACCTCATTCAATTGATGGGAGAGTAGTTGAGCCAAA
ACGTGCTGTAGCAAGAGAGGAATCTGGAAAACAGGGGCTCATGTAAGTGTGAAGAAGCTGTTTGTGGCGGAAT
TAAAGAAGATACTGAGGAACATCACCTTAGAGATTACTTTGAGGAATATGGAAAAATTGATACCATTGAGATAAT
TACTGATAGGCAGTCTGGAAAAGAAAAGAGGCTTTGGCTTTGTTACTTTTTGATGACCATGATCCTGTGGATAAAAT
CGTATTGCAGAAATACCATAACCATCAATGGTCATAATGCAGAAGTAAGAAAGGCTTTGTCTAGACAAGAAATGCA
GGAAGTTCAGAGTTCTAGGAGTGGAAGAGGAGGCAACTTTGGCTTTGGGGATTACGTTGGTGGCGGTGGAAATTT
CGGACCAGGACCAGGAAGTAACCTTTAGAGGAGGATCTGATGGATATGGCAGTGGACGTGGATTTGGGGATGGCTA
TAATGGGTATGGAGGAGGACCTGGAGGTGGCAATTTTGGAGGTAGCCCCGGTTATGGAGGAGGAAGAGGAGGATA
TGGTGGTGGAGGACCTGGATATGGCAACCAGGGTGGGGGCTACGGAGGTGGTTATGACAACATATGGAGGAGGAAA
TTATGGAAGTGGAAATTACAATGATTTTGGAAATTATAACCAGCAACCTTCTAACTACGGTCCAATGAAGAGTGG
AAACTTTGGTGGTAGCAGGAACATGGGGGGACCATATGGTGGAGGAACTATGGTCCAGGAGGCAGTGGAGGAAG
TGGGGGTTATGGTGGGAGGAGCCGATACTCAGCTTCTTCCTATTTGCCATGGGCTTCACTGTATAAATAGGAGAG
GATGAGAGCCCAGAGGTAACAGAACAGCTTCAGGTTATCGAAATAACAATGTAAAGGAACTCTTATCTCAGTCA
TGCATAAATATGCAGTGATATGGCAGAAGACACCAGAGCAGATGCAGAGAGCCATTTTGTGAATGGATTGGATTA
TTTAATAACATTACCTTACTGTGGAGGAAGGATTGTAAAAAAAATGCCTTTGAGACAGTTTCTTAGCTTTTTAA
TTGTTGTTTCTTTCTAGTGGTCTTTGTAAAGAGTGTAGAAGCATTCTTCTTTGATAATGTAAATTTGTAAGTTT
CAGGTGACATGTGAAACCTTTTTTAAGATTTTCTCAAAGTTTTGAAAAGCTATTAGCCAGGATCATGGTGTAAAT
AAGACATAACGTTTTTCTTTAAAAAAATTTAAGTGCGTGTGTAGAGTTAAGAAGCTGTTGTACATTTATGATTT
AATAAAATAATTCTAAAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2405/6881

FIGURE 2213

MEKTLETVPLEKKREKEQFRKLFIGGLSFETTEESLRNYEQQWGKLTDVVMRDPASKRSRGFGFVTFSSMAEV
DAAMAARPHSIDGRVVEPKRAVAREESGKPGAHVTVKKLFVGGIKEDTEEHHLRDYFEEYGKIDTIEIITDRQSG
KKRGFGFVTFDDHDPVDKIVLQKYHTINGHNAEVRKALSRQEMQEVQSSRSGRGGNFFGGDSRGGGGNFGPGPGS
NFRGGSDGYGSGRGFGDGYNGYGGGPGGGNFGGSPGYGGGRGGYGGGGPGYGNQGGGYGGGYDNYGGGNYGSGNY
NDFGNYNQPSNYGPMKSGNFGGSRNMGGPYGGGNYGPGSGGSGGYGGRSRY

WO 2004/030615

PCT/US2003/028547

2406/6881
FIGURE 2214

CGCTGAGGAGACTCCGGTCACTGTCCTCGCCCCGCTCCCCCTTCCCTCCCTTGGGGACCACCGGGGCCACGC
CGCGAACGTAATAGCTCTTCAAGTCTGCAATAAAAAATGCGCTCCAACAAAACCTACATTGCAAAAAATGGGAAA
AAACAGAATGGAAAGAGTAAAAAGTTGAAGAGGCAGAGCCTGAAGAATTTGTCGTGGAAAAAGTACTAGATCGA
CGTGTAGTGAATGGGAAAGTGAATATTTCTGAAGTGAAGGGATTTACAGATGCTGACAATACTTGGGAACCT
GAAGAAAATTTAGATTGTCCAGAATTGATTGAAGCGTTTCTTAACCTCTCAGAAAGCTGGCAAAGAAAAAGATGGT
ACAAAAAGAAAATCTTTATCTGACAGTGAATCTGATGACAGCAAATCAAAGAAGAAAAGAGATGCTGCTGACAAA
CCAAGAGGATTTGCCAGAGGTCTTGATCCTGAAAGAATAATTGGTGCCACAGACAGCAGTGGAGAATTGATGTTT
CTCATGAAATGGAAAGATTGAGATGAGGCAGACTTGGTGCTGGCGAAAAGAGGCAAATATGAAGTGTCCTCAAATT
GTAATTGCTTTTTATGAAGAGAGACTAACTTGGCATTCTTGTCAGAAAGATGAAGCTCAATAATTGTTTACATTG
TTCTTTTATATATATTTATATATATATATAAAAAATTGGGTCTTAGATTTTGGTTTACTAGTGTGACAAAATACT
ACATCCTAATGAAATCAAGTTTGATATGTTTGTGTTGAAAGTAGCGTTGGAAGAGTTGTTGGGGGTTTTTTGCA
TCCATAGCACTGGTTACTTTGAACAAATAAATAAAAGCTTTCTGTAGTTGCTTCCTTTATCAGAAAAGAACATTT
GATACCATGGTATATCATTTCTCTTCAATAAAGAACAGCTTTTCTAAATGTTGGGGGAAATGTCCATAGTCATT
ACTCAGTCAAACTTGTGTTCTCATGAGCCTAAGGACCATTCTAGATTTATTACGTGTTTTTTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTGTATCCATAAAATGCATATGTAATTTTTTTTTGTTTTTAAGCATTCACCCAAACAAAA
AAATCACAGGTAAACCCATGTTTCTGAGATGCCATTATCCAAGCAAAATAAGAGATAATCCCTTCAAGTTAAAT
TGAAAATTTTCTGAAACCATAATTTCAAGTGAATAAGTAATTCTAGATAGGACAATTTAAATTGGATAATTT
TAAAGTGTCTATAATTGCAGTGGTTTATTTGCAAAATTCCTAAAAGGAAAAATTTTATCACTGCCATCACAGCAG
GTTTCCTCATCCAGATGAGGAACTAGACAAATGCTAGTGTGTTTTAACTAGCTAAACAAAACCTAAGTTAAATGA
ACATTTAAAAGTTTCCCTAGCGGGCCATTCTTAGCAAAATGTTGGAATCCCTGTTGCTACATTGACTAAAAGGT
CATGATGAATGGAATATGTAAGACTTGGCTCATAGAAACCTAATCAGATGGTTAGAGGTGTTGGCAGTTTAGGAC
CTGCTGTCATAAATGTGTGAACAACCTTTGTAACTAACCTATTGACCTGCATGTTTTTTCTTTACCCCAATTC
ATTACATGGAGGCTCAATCTTGAGTTTGCTTTTACTGGTTCAGCAAAAGCCAGGAAGAACAACCTTTGTAGTAATCA
AAATGTTATCCAATGTATATTGTTTACTTTATTGTAAATACTGGTGAACAGTGGTTAATAAATAGTTTTATATT
CCTTTATGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2407/6881
FIGURE 2215

MASNKTTLQKMGKKQNGKSKKVVEAEPEEFVVEKVLDRRVVNGKVEYFLKWKGFTDADNTWEPEENLDCPELIEA
FLNSQKAGKEKDGTKRKSLSDSESDDSKSKKKRDAADKPRGFARGLDPERIIGATDSSGELMFLMKWKDSDEADL
VLAKEANMKCPQIVIAFYEERLTWHSCPEDEAQ

WO 2004/030615

PCT/US2003/028547

2408/6881
FIGURE 2216

TCCCCCGGCGGCCCGCGCGCAGCTCCCGGCTCCCTCCCCCTTCGGATGTGGCTTGAGCTGTAGGCGCGGAGGG
CCGGAGACGCTGCAGACCCGCGACCCGGAGCAGCTCGGAGGCGGTGAATAATAGCTCTTCAAGTCTGCAATAAAA
AATGGCCTCCAACAAAACACTACATTGCAAAAAATGGGAAAAAACAGAATGGAAAGAGTAAAAAAGTTGAAGAGGC
AGAGCCTGAAGAATTTGTCGTGGAAAAAGTACTAGATCGACGTGTAGTGAATGGGAAAGTGGAAATATTTCTGAA
GTGGAAGGGATTTACAGATGCTGACAATACTTGGGAACCTGAAGAAAATTTAGATTGTCCAGAATTGATTGAAGC
GTTTCTTAACCTCTCAGAAAGCTGGCAAAGAAAAAGATGGTACAAAAAGAAAATCTTTATCTGACAGTGAATCTGA
TGACAGCAAATCAAAGAAGAAAAGAGATGCTGCTGACAAACCAAGAGGATTTGCCAGAGGTCTTGATCCTGAAAG
AATAATTGGTGCCACAGACAGCAGTGGAGAATTGATGTTTCTCATGAAATGGAAAGATTCAGATGAGGCAGACTT
GGTGCTGGCGAAAGAGGCAAATATGAAGTGTCTCAAATTGTAATTGCTTTTTATGAAGAGAGACTAACTTGGCA
TTCTTGTCCAGAAGATGAAGCTCAATTAATTGTTTACATTGTTCTTTTATATATATTTATATATATATATAAAAAAT
TGGGTCTTAGATTTTGATTTACTAGTGTGACAAAATAACTACATCCTAATGAAAATCAAGTTTGATATGTTTGT
TTGAAAGTAGCGTTGGAAGAGTTGTTGGGGGTTTTTGCATCCATAGCACTGGTTACTTTGAACAAAATAAAATAAA
AGCTTTCTGTAGTTGCTTCCTTTATCAGAAAAGAACATTTGATACCATGGTATATCATTTCCTCTTCATTAAAGA
ACAGCTTTTCTAAATGTTGGGGGAAATGTCCATAGTCATTACTCAGTCAAAACTTGTGTTCTCATGAGCCTAAGG
ACCATTCTAGATTTATTACGTGTTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTATCCATAAAATGCATAT
GTAAATTTTTTTTTGTTTTTAAGCATTCACCCAAACAAAAAATCACAGGTAAACCCATGTTTCTGAGATGCCAT
TATCCAAGCAAATAAGAGATAATCCCTTCAAGTTAAATTGAAAATTTTCTGAAACCATACATTTCAAGTGAA
ATAAGTAATCTAGATAGGACAATTTAAATTGGATAATTTTAAAGTGTCTATAATTGCAGTGGTTTATTTGCAAA
ATTCCTAAAAGGAAAAATTTTATCACTGCCATCACAGCAGGTTTCTCATCCAGATGAGGAACTAGACAAATGC
TAGTGTGTTTTAACTAGCTAAACAAAACCTAAGTTAAATGAACATTTAAAAGTTTCCCTAGCGGGCCATTCTTAG
CAAAATGTTGGAATCCCTGTTGCTACATTGACTAAAAGGTCATGATGAATGGAATATGTAAGACTTGGCTCATAG
AAACCTAATCAGATGGTTAGAGGTGTTGGCAGTTTAGGACCTGCTGTCATAAATGTGTGAACAACCTTTTGTAAC
CTAACCTATTGACCTGCATGTTTTTTCTTTACCCCAATTCATTACATGGAGGCTCAATCTTGAGTTTGCTTTACT
GGTTCAGCAAAAGCCAGGAAGAACAACCTTTGTAGTAATCAAAATGTTATCCAAGTGTATATTGTTTACTTTATTG
TAAATACTGGTGAACAGTGGTTAATAAATAGTTTTATATTCCTTTATGCAA

WO 2004/030615

PCT/US2003/028547

2409/6881
FIGURE 2217

MASNKTTLQKMGKKQNGKSKKVEEAPEEFVVEKVLDRRVVNGKVEYFLKWKGF
TDADNTWEPEENLDCPELIEA
FLNSQKAGKEKDGTKRKSLSDESDDSKSKKKRDAADKPRGFARGLDPERII
GATDSSGELMFLMKWKDSDEADL
VLAKEANMKCPQIVIAFYERLTWHSCPEDEAQ

WO 2004/030615

PCT/US2003/028547

2410/6881
FIGURE 2218

GACGGCAAATGGCGGACTTCGACACCTACGACGATCAGGCCTACAGCAGCTTCGGCAGCGGCAGAGGGTCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCGGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGTACGGCTAG
TCAGAGACAAAGACACAGATAAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCACCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAG
GTAGTCGCCCAGGCGACCGGCGAACAGGCCCCCATGGGCAGCCGCTTCGGAGATGGCCCTCCCTCGGTGGAT
CCAACATGGATTTAGAGAACCCACAGAAGAGGAAAGCGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAG
TCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGAAGTTG
TTCAAAAGGAGCAAAAATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGG
TGAGTCCCCGGGCAGCCGTCCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCT
TGTGAGTGCATGTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTT
TGTGCGTTTTTTTCTTTCTTCCGCTGCTTCCCCATTTTCTTCTGTCTTTTTCTCCTGCTCCTTGTTTTCCAG
CAGCACACGGGGTTCTCTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTGGGCTGCGGTGCTGCGTCATTT
TTCTTTTGCTTTCTCTTTACTTTAGACACTGGCCCAACTCCAGGAGTTTCTTTTCATTCCCTCAGTGCTTCTCTT
CTGACCTGCATGTTGAGTTCTGTATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACCTGCAGA
GACCTTGTTTGGTATTAGCTGTGATGGATATAGAGAATCGGAGGCACCTTGTTTTACAACTAGGATAAAAAATAT
CTGCAGGGTCCCTTTCCATTCCCTATTTAGAGGGAGTCCCTGGCTCCATGACCCCTCCCGAGTGGACTGTCCAAGCA
GATAGGCTCACACGAGAAAACAGTGAGGCTGAAAGGGGGGGCCATGGAAGAGCGGTAGGGAGTCCACGGAGAAGAT
GCAGTGAATGCTTGATGCATTACACGTGTGTGTGTCCCAGCTAGTTCACTCCTTTCCCGTGCCTGGTGGAGG
CTCGCTCTCTGCCCCGGTGCAGTGAACGGCCAGCGGGTTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGA
GGGGGTGGTGCTGGCGCTGCACTGGGCTGACTGCGGCGCTGACACAGCGTTTCCCCCATCCCTGTTGCCTGTGT
GTTGTGTGGATCTGTTCTAGTATAGGCAACATAATGAGATACTGTGCTTCCACCTCCCTTCAGTTAGAGCC
AAAATGGGTCTAGAATCTGGCACTTTACTCATTTCTTTGATAAATTGTACTGTGCAGAGCTGTCAGGAACCTTC
AGATAGCAGTAGAGGACTGCAGCTGCCTAGGTCTGCGGCCACATCTTGGGGACACACTGGATTGTTCCCATGTGC
AGGGTTCAGCACTTACGTGGGAGTGCTAGGGGTAGGCTTTTGAGCTTGAACGCCTGCGTGTGAACAGATGAAAA
ATCCTTCAGTACCCAAGTCCAGTCTGTCCTATGGGGAGCAGTTTGGGGCGGCCGCGCAGCAGGAGCCTGGGAAA
GAGGCCCTCGCCAGGTGATGGCAGGGCCAGGGTGGCCTGGGGCACCCAGCGGAATGTGCTTAGTATTTGGTCACC
AGCCGTCATCCTGGGCTTTTCTACTGTGTCTTGTACAAAGCCTCAGCAATCCACAGAATCTCTCTCCTTCTCT
TCCACCTGTCAGCTTCTCTGCTTCTGAGATAAGAACCATTGTGTAAACACCAACACTTAACTTCAGAAAGACATG
CATTATGTGGTGTAAATCAAACCCGAGGCTTTCAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACA
AAACACATGCATCTAACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACAC
ATTAGCTATATGACAGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAAGAAAACCTT
ACGTAATATTT

WO 2004/030615

PCT/US2003/028547

2411/6881
FIGURE 2219

GGAGCGGAGACGGCAAATGGCGGACTTCGACACCTACGACGATCAGGCCTACAGCAGCTTCGGCAGCGGCAGAGG
GTCCCGCGGCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATA
CGTAGGAAATCTACCTTTCAATACGGTTTCGGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAAGGAGTGT
ACGGCTAGTCAGAGACAAAGACACAGATAAAATTTAAAGGATTCTGCTATGTAGAATTTCGATGAAGTGGATTCCCT
TAAGGAAGCCTTGACATACGATGGTGCCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAA
ACAAGATAAAGGTGGCTTTGGATTTCAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGGCCCTCCCTCGG
TGGATCCAACATGGATTTTCAGAGAACCCACAGAAGAGGAAAGCGCACAGAGACCACGACTCCAGCTTAAACCTCG
AACAGTCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGA
AGTTGTTTAAAAGGAGCAAAAATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAG
CCTGGTGAGTCCCCGGGCAGCCGTCCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACA
CAGCTTGTGAGTGATGTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGC
CTGTTTGTGCGTTTTTTTTCTTTCTTCCGCTGCTTCCCCATTTTCCTTCCACCTGTCAGCTTCTCT

WO 2004/030615

PCT/US2003/028547

2412/6881
FIGURE 2220

GGAGCGGAGACGGCAAATGGCGGACTTCGACACCTACGACGATCAGGCCTACAGCAGCTTCGGCAGCGGCAGAGG
GTCCCGCGGCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATA
CGTAGGAAATCTACCTTTCAATACGGTTTCGGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGT
ACGGCTAGTCAGAGACAAAGACACAGATAAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCT
TAAGGAAGCCTTGACATACGATGGTGCCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAA
ACAAGATAAAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGACTTCTTAGGGGG
CAGGGGAGGTAGTCGCCCAGGCGACCGGCGAACAGGCCCCCCTGCGGAGATGGCCCTCCCT
CGGTGGATCCAACATGGATTTTCAGAGAACCCACAGAAGAGGAAAGCGCACAGAGACCACGACTCCAGCTTAAACC
TCGAACAGTCGCGACGCCCCCTCAATCAAGTAGCCAATCCCACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGA
GGAAGTTGTTCAAAAGGAGCAAAATTGAGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCTTGTGAGTGCAT
GTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTTTGTGCGTTTT
TTCTTTCTTCCGCTGCTTCCCCATTTTCCTTC

WO 2004/030615

PCT/US2003/028547

2413/6881
FIGURE 2221

MADFDTYDDQAYSSFGSGRGSRSAGGHGSRSQKELPTEPPYTAYVGNLPFNTVRGDIDAIKDLIRSIVRLVRD
KDTDKFKGFCYVEFDEVDSLKEALTYDGALLGDRSLRVDIAEGRKQDKGGFGFRKGGPDDRGFRDDFLGGRGGSR
PGDRRTGPPMGSRFGDGPPLGGSNMDFREPTEESAQRPRQLQKPRTVATPLNQVANPNSAIFGGARPREEVVQK
EQK

WO 2004/030615

PCT/US2003/028547

2414/6881
FIGURE 2222

CGCGTCAGGCCGCTCCTCTCGGCTCCGCGCTCCTTCCCTCGCGCGTGGGCACCCGCCCCGAGCGGTGAGAGCGC
GTGCGCGCGCGCCCTTCTCCGTGGGCGAGCCAGCCAGTCCCCTGACACGCTCGCAGTCTGTGGGCCCTCCGGG
AGGCGGGCGGAGGTACCCGCGGGGAGAGGGCGGGCGCAGCATGGCAGCCTCCTTACGGCTCCTCGGAGCTGCCTC
CGGTCTCCGGTACTGGAGCCGGCGGGCTGCGGCCGGCAGCCGGCAGCTTTGCAGCGGTGTGTTCTAGGTCAGTGGC
TTCAAAGACTCCAGTTGGATTCAATTGGACTGGGCAACATGGGGAATCCAATGGCAAAAAATCTCATGAAACATGG
CTATCCACTTATTATTTATGATGTGTTCCCTGATGCCTGCAAAGAGTTTCAAGATGCAGGTGAACAGGTAGTATC
TTCCCCAGCAGATGTTGCTGAAAAAGCTGACAGAATTATTACAATGCTGCCACCAGTATCAATGCAATAGAAGC
TTATTCCGGAGCAAATGGGATTCTAAAAAAGTGAAGAAGGGCTCATTATTAATAGATTCCAGCACTATTGATCC
TGCAGTTTCAAAGAATTGGCCAAAGAAGTTGAGAAAATGGGAGCAGTTTTCATGGATGCCCTGTTTCTGGTGG
TGTAGGAGCTGCACGATCTGGGAACCTCACGTTTATGGTGGGAGGAGTTGAAGATGAATTTGCTGCTGCCAAGA
GTTGCTGGGGTGCATGGGCTCCAACGTGGTGTACTGTGGAGCTGTTGGGACTGGGCAGGCGGCAAAGATCTGCAA
CAACATGCTGTTAGCTATTAGTATGATTGGAAGTCTGAAGCTATGAATCTTGGAAATCAGGTTAGGGCTTGACCC
AAAATACTGGCTAAAATCCTAAATATGAGCTCAGGACGGTGTGGTCAAGTGACACTTATAATCCTGTACCTGG
AGTGATGGATGGCGTTCCCTCGGCTAATAACTATCAGGCTGGATTTGGAACAACACTCATGGCTAAGGATCTGGG
ATTGGCACAAGACTCTGCTACCAGCACAAAGAGCCCAATCCTTCTTGGCAGTCTGGCCCATCAGATCTACAGGAT
GATGTGTGCAAAGGGCTACTCAAAGAAAGACTTCTCATCCGTGTTCCAGTTCCTACGAGAGGAGGAGACCTTCTG
AGTGTGCCCTTTGGCCACGGACACTGTTGGGAACCAAACTCTGTCTTGGAGCCTCCTTTTAGCTCACTCCACAAG
TAAATGGATTTAATCAAAGGTCACCTATCTGCTTTTGATTGTCTAGGTCAAGTAATCCCTAGGATTTTTCACCG
CTTATTCTTTTTGTCTTTTAAACAAACATATTATCCGAATTTTTTTCTGCAAGCCACTGATAGTCTCTGCTAAC
TAGCTTAATTGACCTTTTACAAAGTTTGATCCCCAAGCATCCTCAACTAAATCATTGAATACTTCAATCAGGAT
ATTATCTGCTTTACTTTACAAATAAAACCAAATCTTTGTCAACAGGATGAAACCCATCTTAAAGGAAAGAAAAG
GAATTGGTGTGAAGAGAGAAGTTAGAGAAGGGAAATGCAGTGAATTACTATCTGTGTCCATCAGGAAGTTTGTCC
TGTTAACCAAATGGTTACTGCACTACCAGGGTACTGGTTTATTTTCCAGGGAGCTGATAAAGCAGGAGAACTGT
TGCTGCATGTTTTCTATTTGGACTCCGTACAATATGGTAGGATATCCCTCACCAACTCCCGACACTCAGCAGAC
TTGTTTTTATATTTTTTCTTTCTTGTTCATTCTTACTACGTATTTTTTGAAGTAAAGATGACATCTTTAGATGC
ATTTTCAGAGCCAATGATGATATTTGCTTTAGATAATTATTATATTATATAAATATAGCCATATTATTTTGAATT
CAAATAAATTTCTATACTGGT

WO 2004/030615

PCT/US2003/028547

2415/6881
FIGURE 2223

MAASLRLLGAASGLRYWSRRLRPAAGSFAAVCSRSVASKTPVGF IGLGNMGNPMAKNLMKHGYPLIIYDVFPDAC
KEFQDAGEQVVSSPADVAEKADRIITMLPTSINAIEAYSGANGILKKVKKGSLLIDSSTIDPAVSKELAKEVEKM
GAVFMDAPVSGGVGAARSGNLTFMVGGVEDEF AAAQELLGCMGSNVVYCGAVGTGQAAKICNNMLLAISMIGTAE
AMNLGIRLGLDPKLLAKILNMSSGRCWSSDTYNPVPVMDGVPSANNYQGGFGTTLMAKDLGLAQDSATSTKSPI
LLGSLAHQIYRMMCAKGYSKKDFSSVFQFLREEETF

WO 2004/030615

PCT/US2003/028547

2416/6881
FIGURE 2224

GACGCAAGGCCTACTGTCTGGCTGGGAGGGGAGGTGTAGCCGGTCTTTGGGGGTAGGCGGTAGTGGCGGAAGAGGT
TCGGCGGCTGATGGCGGATCAGGATCGGAAGCCTGCGTAACCTTTCTCCCTTGATCCGGGAGTCTTTCCACTGGAT
TCACAATGACATCCTTTCAAGAAGTCCCATTTGCAGACTTTCCAACCTTTGCCCATGTCTCTTTCAAATGTGGCCA
AGAGTTACCTTCCTAATGCACACCTGGAATGTCTTACACCTTAACTCCATATATTTCATCCACATCCAAAAGATT
GGGTTGGTATATTCAAGGTTGGATGGAGTACTGCTCGTGATTATTACACGTTTTTATGGTCCCCTATGCCTGAAC
ATTATGTGGAAGGATCAACAGTCAATTGTGTACTAGCATTCCAAGGATATTACCTTCCAAATGATGATGGAGAAT
TTTATCAGTTCTGTTACGTTACCCATAAGGGTGAAATTCGTGGAGCAAGTACACCTTTCCAGTTTCGAGCTTCTT
CTCCAGTTGAAGAGCTGCTTACTATGGAAGATGAAGGAAATTCGTGACATGTTAGTGGTGACCACAAAAGCAGGCC
TTCTTGAGTTGAAAATTGAGAAAACCATGAAAGAAAAAGAAGAACTGTTAAAGTTAATTGCCGTTCTGGAAAAAG
AAACAGCACAACTTCGAGAACAAGTTGGGAGAATGGAAAGAGAACTTAACCATGAGAAAGAAAGATGTGACCAAC
TGCAAGCAGAACAAAAGGGTCTTACTGAAGTAACACAAAGCTTAAAAATGGAATGAAGAGTTTAAAGAGGGT
TCAGTGATGCTACATCCAAAGCCCATCAGCTTGAGGAAGATATTGTGTCTAGTAACACATAAAGCAATTGAAAAAG
AAACCGAATTAGACAGTTTAAAGGACAAACTCAAGAAGGCACAACATGAAAGAGAACAACTTGAATGTCTAGTTGA
AGACAGAGAAGGATGAAAAGGAACCTTTATAAGGTACATTTGAAGAATACAGAAATAGAAAATACCAAGCTTATGT
CAGAGGTCCAGACTTTAAAAAATTTAGATGGGAACAAAGAAAGCGTGATTACTCATTTCAAAGAAGAGATTGGCA
GGCTGCAGTTATGTTTGGCTGAAAAGGAAAATCTGCAAGAAGCTTTCTGCTTACAACCTCAAGTAAAGAAGATA
CTTGTTTTTTAAAGGAGCAACTTCGTAAAGCAGAGGAACAGGTTTCAGGCAACTCGGCAAGAAGTTGCTTTCTGG
CTAAAGAACTCAGTGATGCTGTCAACGTACGAGACAGAACGATGGCAGACCTGCATCTGCACGCTTGGAAAACG
AGAAAGTGAAAAGCAGTTAGCTGATGCAGTGGCAGAACTTAACTAAATGCTATGAAAAAGATCAGGACAAGA
CTGATACACTGGAACACGAACCTAAGAAGAGAAGTTGAAGATCTGAACTCCGTCTTCAGATGGCTGCAGACCATT
ATAAGAAAAATTTAAGGAATGCCAAAGGCTCCAAAAACAATAAACAACCTTTTCAGATCAATCAGCTAATAATA
ATAATGTCTTCACAAAGAAAACGGGGAATCAGCAGAAAGTGAATGATGCTTCAGTAAACACAGACCCAGCCACTT
CTGCCTCTACTGTAGATGTAAAGCCATCACCTTCTGCAGCAGAGGCAGATTTTGACATAGTAACAAAGGGGCAAG
TCTGTGAAATGACCAAGAAATGCTGACAAAACAGAAAAGTATAATAAATGTAAACAACCTTTCAGGATGAGA
AAGCAAAATGCAATAAATATGCTGATGAACCTGCAAAAATGGAGCTGAAATGGAAAGAACAAGTGAAAATTGCTG
AAAATGTAAACCTTGAAGTACAGTGAAGTACAGGACAATTATAAAGAACTTAAAGGAGTCTAGAAAATCCAGCAG
AAAGGAAAATGGAAGGTCAGAAATCCCAGAGTCTCAATGTTTTCAAAACATGCTCAGAGCAAAATGGTTATGTTT
TCACATTGTCAAATGCACAACCAAGTCTGCAATATGGTAATCCTTATGCATCTCAGGAAACAAGAGATGGAGCAG
ATGGTGCTTTTTTACCCAGATGAAATACAAAGGCCACCTGTCTAGAGTCCCCTCTTGGGGACTGGAAGACAATGTTG
TCTGCAGCCAGCCTGCTCGAAACTTTAGTCGGCCTGATGGCTTAGAGGACTCTGAGGATAGCAAGAAGATGAGA
ATGTGCCTACTGCTCCTGATCCTCCAAGTCAACATTTACGTGGGCATGGGACAGGCTTTTGCTTTGATTCCAGCT
TTGATGTTACAAAGAAGTGTCCTCTGTGAGTTAATGTTTCTCTCCTAACTATGATCAGAGCAAATTTGAAGAAC
ATGTTGAAAGTCACTGGAAGGTTGTCCTGATGTGTCAGCGAGCAGTTCCCTCCTGACTATGACCAGCAGGTGTTTG
AAAGGCATGTGTCAGACCCATTTTGATCAGAAATGTTCTAAATTTTGACTAGTTACTTTTTATTATGAGTTAATATA
GTTTAGCAGTAAAAAAAAAAAAAAAAAACACACCTAAATAGACCCTGAGGAGACCATAGAGCGGATGCTTTCA
TGCACCCCTTTACTGCACCTTTCTGACCAGGAGCTACTTTGAGTTTGGTGTACTAGGATCAGGGTCAGTCTTTGGC
TTATCAATAAATTTTAACTCTCTGTTAATCTTACCTGCTTTAAAAAAAAGTTCTTGTGTGTTTCGTATCTTTATTTA
TTCCCTAGTTTGCAGAACTGTCTGAATAAAGGATACAAGGATTATTTCATGTTACTGCAGTAAAAACGTGTAT
GTATTAGTGCTAGATTATTTAGCAGAAATATTCACAAGTTTCTGTTGACCTTGTTGATTGAGCATGACTACTAA
ATATTATGTAATAAAAAGCATTGTCTATAAC

WO 2004/030615

PCT/US2003/028547

2417/6881
FIGURE 2225

ATGGAGAAGCAGAGAGGGAAGTGCAGAGACAGGTCACCCAGGCGCCTGGAAACTGCCTCTATGGCCTTCACGGGA
AACGGCCTCTTTCTACTCCGGATCCCAGACTGTGTTTCTTTGAAACTGACCGTCAGAGGAGAGCGGCTGGAGGCG
GACAGACGTCTGCAGTGGGAGGCGCTCCAGGCGTTCCAGGCAGTGTCTGCGGCGAGTCACCCGCGACCGCGAG
TCACCTCACCAAGCCCTGAATTGGGACAGGAGACGAGACGTGTCGACGAGCTGCGGAGTTCCTCGCTTCTCTGGG
CCCTGCCAGCTCACAGCCAAGGTGCACCAGAGCCTCCGTACCCGCCCTACAGAGCACGTACTTTTATCACACGA
ACTATGACTCAGACACCACAAACCCAGACCAGGCCTCCAGGTGAGAAGTTGACTCCCCTGAGGCCTGTGGTAGGA
GAATGTGGTCTGGAAAATGAGGTGTCAGTGGTGATCAGACATCATCACTTTTCTAGTGACTGTCAGCTTAGTTTT
GTCCTACAGTTGTCTTGA

WO 2004/030615

PCT/US2003/028547

2418/6881
FIGURE 2226A

CCCCGACTAGCCCCGACAGTCCCCGACTAGCCCCGACAGCCCCAGCAGGATCTGCATCGTCATCGAGCCGGCCCCAGC
TTCTGAAGGGAGATGTCAATGGTGAAATGCTACCACAAGAAATACCGCTCGGCCACCCGTGACGTCATTTTCCGCC
TGCAGTTTCACACTGGGGCTGTGCAGGGCTACGGGCTGGTGTGGGAAGGAGGATCTGGACAATGCCAGCAAAG
ATGACCGTTTTCTGACTATGGGAAGGTTGAATTAGTCTTCTCTGCCACGCCTGAGAAGATTCAAGGGTCCGAAC
ACTTGTACAACGACCACGGTGTGATTGTGGACTACAACAACAGACCCACTGATACGCTGGGACTCGTACGAGA
ACCTCAGTGCAGATGGAGAAGTGCTACACACGCAGGGCCCTGTCTGATGGCAGCCTTTACGCGAAGGTGAGGAAGA
AAAGCTCCTCGGATCCTGGCATCCCAGGTGGCCCCCAGGCAATCCCGGCCACCAACAGCCCAGACCACAGTGACC
ACACCTTGCTGTCTGTCAGCAGTGACTCCGGCCACTCTACAGCCTCTGCCAGGACGGATAAGACGGAAGAGCGCCTGG
CCCCAGGAACCAGGAGGGGGCTGAGTGCCAGGAGAAGGCAGAGTTGGACCAGCTGCTCAGTGGGCTTTGGCCTGG
AAGATCCTGGAAGCTCCCTCAAGGAAATGACTGATGCTCGAAGCAAGTACAGTGGGACCCGCCACGTGGTGCCAG
CCCAGGTTACAGTGAATGGAGACGCTGCTCTGAAGGATCGGGAGACAGACATTCTGGATGACGAGATGCCCCACC
ACGACCTGCACAGTGTGGACAGCCTTGGGACCCTGTCTCTCTCGGAAGGGCCTCAGTCGGGCCACCTGGGTCCCT
TCACCTGCCACAAGAGCAGCCAGAACTCACTCCTATCTGACGGTTTTTGGCAGCAACGTTGGTGAAGATCCGCAGG
GCACCCCTCGTTCCGGACCTGGGCCTTGGCATGGACGGCCCTATGAGCGGGAGCGGACTTTTGGGAGTCGAGAGC
CCAAGCAGCCCCAGCCCCCTGCTGAGAAAGCCCTCAGTGTCCGCCCAGATGCAGGCCTATGGGCAGAGCAGTACT
CCACACAGACCTGGGTGCGCCAGCAGCAGATGGTTGTAGCTCACCAGTATAGCTTCGCCCCAGATGGGGAGGCC
GGCTGGTGAGCCGCTGCCCTGCAGACAATCCTGGCCTCGTCCAGGCCCAGCCCAGAGTGCCACTCACCCCCACCC
GAGGGACAGCAGTAGGGTGGCTGTCCAGAGGGGTGTAGGCAGTGGGCCACATCCCCCTGACACACAGCAGCCCT
CTCCAGCAAAGCGTTCAAACCCAGGTTTTCCAGGAGACCAGGTTGTGAATGGAGCCGGGCCAGAGCTGAGCACAG
GCCCCCTCCCCAGGCTCGCCACCCCTGGACATCGACCAGTCCATCGAGCAGCTCAACAGGCTGATCCTGGAGCTGG
ATCCCACCTTCGAGCCCATCCCTACCCACATGAACGCCCTCGGTAGCCAGGCCAATGGCTCTGTGTCTCCAGACA
GCGTGGGAGGTGGGCTCCGGGCAAGCAGCAGGCTGCCTGACACAGGAGAGGGCCCCAGCAGGGCCACCGGGCGGC
AAGGCTCCTCTGCTGAACAGCCCCCTGGGCGGGAGACTCAGGAAGCTGAGCCTGGGGCAGTACGACAACGATGCTG
GGGGGCAGCTGCCCTTCTCAAATGTGCATGGGGAAAGGCTGGTGTGGACTATGCCCCAAACCTGCCGCCATTCC
CCTCACCAGCGGACGTCAAAGAGACGATGACCCCTGGCTATCCCCAGGACCTCGATATTATCGATGGCAGAAATT
TAAGTAGCAAGGAGTCCATGTGTTCAACTCCAGCATTTCTGTGTCTCCAGAGACACCGTATGTGAAAACAGCGC
TGCGCCATCCTCCGTTTCAGCCACCTGAGCCCCCGCTGAGCAGCCAGCCAGTCAGCACAAAGGAGGACGTGAAC
CACGAAGCTGCCCTGAGACGCTCACTCACGCTGTGGGGATGTGAGAGAGCCCCATCGGACCCAAATCCACGATGC
TCCGGGCTGATGCGTCTCTGACGCCCTCCTTTACAGCAGGCTTTTGCTTCTTCTGACCATTTCCAGCAACGGCC
CTGGGCAGAGGAGAGAGAGCTCCTCTTCTGCAGAACGCCAGTGGGTGGAGAGCAGCCCCAAGCCCATGGTTTCCC
TGCTGGGGAGCGGCCGGCCACCGGAAGTCCCTCAGCGCTGAGTTCTCCGGTACCAGGAAGGACTCCCCAGTGC
TGCTCTGCTTCCCGCCGTGAGAGCTCAGGCTCCTTTCCACAGCCATGAGCTGTCCCTAGCAGAGCCACCGGACT
CCCTGGCGCCTCCAGCAGCCAGGCCCTTCTGGGCTTCGGCACCGCCCAAGTGGGAAGTGGCCTTCCGCCCGAGG
AGGACCTGGGGGCTTGTGTCGCAATTCTCATGGAGCGTCACCGACCCCAAGCATCCCGCTGACAGCGACAGGGG
CTGCCGACAATGGCTTCTGTGCCACAACCTTTCTACGGTGGCGCCTGGACACAGCAGCCACCACAGTCCAGGCC
TGCAGGGCCAGGGTGTGACCCTGCCCGGGCAGCCACCCCTCCCTGAGAAGAAGCGGGCCTCGGAGGGGGATCGTT
CTTTGGGCTCAGTCTCTCCCTCCTCCAGTGGCTTCTCCAGCCCGCACAGCGGGAGCACCATCAGTATCCCCTTCC
CAAATGTCTTCCCGACTTTTCCAAGGCTTCAGAAGCGGCCTCACCTCTGCCAGATAGTCCAGGTGATAAACTTG
TGATCGTGAAATTTGTTCAAGACACTTCCAAGTTCTGGTACAAGGCGGATATTTCAAGAGAACAAGCCATCGCCA
TGTTGAAGGACAAGGAGCGGGGCTCATTATTGTTTCGAGACAGCCATTCTTCCGAGGGGCTATGGCCTGGCCA
TGAAGGTGGCCACGCCCCACCTTCAGTCTGTCAGCTGAACAAGAAAGCTGGAGATTGGCCAATGAACTCGTCC
GGCACTTTTTGATCGAGTGTACCCCGAAGGGAGTGGGTTGAAAGGGTGTCTGAATGAACCATATTTCCGGGAGCC
TGACGGCCTTGGTGTGCCAGCATTCCATCACGCCCTTGGCCTTGCCGTGCAAGCTGCTTATCCAGAGAGAGATC
CATTGGAGGAAATAGCAGAAAGTTCTCCCCAGACGGCAGCCAATTCAGCAGCTGAGCTGTTGAAGCAGGGGGCAG
CCTGCAACGTGTGGTACTTGAACCTGTGTGGAGATGGAGTCCCTCACCGGCCACCAGGCGATCCAGAAGGCCCTGA
GCATACCCCTGGTCCAGGAGCCTCCACCTGTGTCCACAGTTGTGCACTTCAAGGTGTGAGCCAGGGCATCACCC
TGACAGACAATCAGAGGAAGCTCTTCTCCGGAGGCATTACCCCGTGAACAGTGTGATTTTCTGTGCCTTGGACC
CACAAGACAGGAAGTGGATCAAAGATGGCCCTTCTCAAAGTCTTTGGATTGTGGCCCCGAAGCAGGGCAGTG

PCT/US2003/028547

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WO 2004/030615

PCT/US2003/028547

2420/6881
FIGURE 2227

MVKCYHKKYRSATRDVIFRLQFHTGAVQGYGLVFGKEDLDNASKDDRFPDYGKVELVFSATPEKIQGSEHLYNDH
GVIVDYNTTDPLIRWDSYENLSADGEVLHTQGPVDGSLYAKVRKKSSSDPGIPGGPQAIPATNSPDHSDHTLSVS
SDSGHSTASARTDKTEERLAPGTRRGLSAQEKAELDQLLSGFGLEDPGSSLKEMTDARSKYSGTRHVVAQVHVN
GDAALKDRETDILDDEMPHHDLHSVDSLGLTSSSEGPQSAHLGPFTCHKSSQNSLLSDGFGSNVGEDPQGTLVFPD
LGLGMDGPYERERTFGSREPKQPQLLRKPSVSAQMQAYGQSSYSTQTWVRQQMVVAHQYSFAPDGEARLVSR
PADNPGLVQAQPRVPLTPTRGTSSRVAVQRGVSGSPHPPDTQQPSPSKAFKPRFPDQVNVGAGPELSTGPS
PTLDIDQSIEQLNRLILELDPTFEPITHMNALGSQANGSVSPDSVGGGLRASSRLPDTEGSPSRATGRQGSSAE
QPLGGRLRKLSLGQYDNDAGGQLPFSKCAWGKAGVDYAPNLPPFPSPADVKETMTPGYQDLDIIDGRILSSKES
MCSTPAFPVSPETPYVKTALRHPPFSPPEPPLSSPASQHKGGREPRSCPETLTHAVGMSESPIGPKSTMLRADAS
STPSFQQAFASSCTISSNGPGQRRESSSSAERQWVESPSPKPMVSLGSGRPTGSPLSAEFSGTRKDSFVLS
SELPQAFHSHSLAEPPDSLAPPSSQAFLGFGTAPVGSGLPPEEDLGALLANSHGASPTPSIPLTATGAADNGF
LSHNFLTIVAPGHSSHHSPGLQGQGVTLPGQPPLPEKKRASEGDRSLGSPSSSGFSSPHSGSTISIPFPNVLPD
FSKASEAASPLPDSFGDKLVIVKFVQDTSKFWYKADISREQAIAMLDKKEPGSFIVRDSHSHFRGAYGLAMKVATP
PPSVLQLNKKAGDLANELVRHFLIECTPKGVRLKGCSNEPYFGSLTALVCQHSITPLALPCKLLIPERDPLEEIA
ESSPQTAANSAAELLKQGAACNVWYLNSEVESLTGHQAIQKALSITLVQEPPEPVSTVVHFKVSAQGITTLDNQR
KLFFRRHYPVNSVIFCALDPQDRKWKIDGPSSKVFGEFVARKQGSATDNVCHLFAEHDPEQPASAIVNFVSKVMIG
SPKKV

WO 2004/030615

PCT/US2003/028547

2421/6881
FIGURE 2228

GGCACGAGGCACAGCTTCGCGCCGTGTACTGTGCGCCCCATCCCTGCGCGCCAGCCTGCCAAGCAGCGTGCCCCG
GTTGCAGGCGTCATGCAGCGGGCGCGACCCACGCTCTGGGCCGCTGCGCTGACTCTGCTGGTGCTGCTCCGCGGG
CCGCCGGTGGCGCGGGCTGGCGCGAGCTCGGGGGGCTTGGGTCCCCTGGTGCGCTGCGAGCCGTGCGACGCGCGT
GCACTGGCCCACTGCGCGCCTCCGCCCGCCGTGTGCGCGGAGCTGGTGCGCGAGCCGGGCTGCGGGCTGCTGCCTG
ACGTGCGCACTGAGCGAGGGGCCAGCCGTGCGGCATCTACACCGAGCGCTGTGGCTCCGGCCCTTCGCTGCCAGCCG
TCGCCCCGACGAGGCGCGACCGCTGCAGGCGCTGCTGGACGGCCGCGGGCTCTGCGTCAACGCTAGTGCCGTGAGC
CGCCTGCGCGCCTACCTGCTGCCAGCGCCGCCAGCTCCAGGAAATGCTAGTGAGTCGGAGGAAGACCGCAGCGCC
GGCAGTGTTGGAGAGCCCCGTCCGTCTCCAGCACGCACCGGGTGTCTGATCCCAAGTTCCACCCCTCCATTCAAAG
ATAATCATCATCAAGAAAGGGCATGCTAAAGACAGCCAGCGCTACAAAGTTGACTACGAGTCTCAGAGCACAGAT
ACCCAGAATCTCTCCCGAGTCCAAGCGGGAGACAGAATATGGTCCCTGCCGTAGAGAAATGGAAGACACACTG
AATCACCTGAAGTTCCCTCAATGTGCTGAGTCCCAGGGGTGTACACATTCCCAACTGTGACAAGAAGGGATTTTAT
AAGAAAAAGCAGTGTCGCCCTTCCAAAGGCAGGAAGCGGGGCTTCTGCTGGTGTGTGGATAAGTATGGGCAGCCT
CTCCCAGGCTACACCACCAAGGGGAAGGAGGACGTGCACTGCTACAGCATGCAGAGCAAGTAGACGCCTGCCGCA
AGGTTAATGTGGAGCTCAAATATGCCTTATTTTGCACAAAAGACTGCCAAGGACATGACCAGCAGCTGGCTACAG
CCTCGATTTATATTTCTGTTTGTGGTGAAGTATTTTTTTTAAACCAAAGTTTAGAAAGAGGTTTTTGAAATGCC
TATGGTTTCTTTGAATGGTAACTTGAGCATCTTTTCACTTTCCAGTAGTCAGCAAAGAGCAGTTTGAATTTTCT
TGTCGCTTCTATCAAAATATTAGAGACTCGAGCACAGCACCCAGACTTCATGCGCCCGTGGAATGCTCACCAC
ATGTTGGTGAAGCGGCCGACCACTGACTTTGTGACTTAGGCGGCTGTGTTGCCTATGTAGAGAACACGCTTAC
CCCCACTCCCCGTACAGTGCGCACAGGCTTTATCGAGAATAGGAAAACCTTTAAACCCCGGTATCCGGACATCC
CAACGCATGCTCCTGGAGCTCACAGCCTTCTGTGGTGTCAATTTCTGAAACAAGGGCGTGGATCCCTCAACCAAGA
AGAATGTTTATGTCTTCAAGTGACCTGTACTGCTTGGGGACTATTGGAGAAAATAAGGTGGAGTCCTACTTGTTT
AAAAAATATGTATCTAAGAATGTTCTAGGGCACTCTGGGAACCTATAAAGGCAGGTATTTGGGGCCCTCCTCTTC
AGGAATCTTCTGAAGACATGGCCCAGTCGAAGGCCAGGATGGCTTTTGCTGCGGCCCGTGGGGTAGGAGGGA
CAGAGAGACAGGGAGAGTCAGCCTCCACATTAGAGGCATCACAAGTAATGTCACAATTCTTCGGATGACTGCAG
AAAATAGTGTTTTGTAGTTCAACAACCTCAAGACGAAGCTTATTTCTGAGGATAAGCTCTTTAAAGGCAAAGCTTT
ATTTTCATCTCTCATCTTTTGTCTCCTTAGCACAAATGTAAAAAAGAATAGTAATATCAGAACAGGAAGGAGGAA
TGGCTTGCTGGGGAGCCCATCCAGGACACTGGGAGCACATAGAGATTACCCATGTTTGTGAACTTAGAGTCAT
TCTCATGCTTTTCTTTATAATTACACATATATGCAGAGAAGATATGTTCTTGTTAACATTGTATACAACATAGC
CCCAAATATAGTAAGATCTATACTAGATAATCCTAGATGAAATGTTAGAGATGCTATTTGATACAACCTGTGGCCA
TGACTGAGGAAAGGAGCTCACGCCAGAGACTGGGCTGCTCTCCCGAGGCCAAACCCAAGAAGGTCTGGCAAAG
TCAGGCTCAGGGAGACTCTGCCCTGCTGCAGACCTCGGTGTGGACACACGCTGCATAGAGCTCTCCTTGAAACA
GAGGGGTCTCAAGACATTCTGCCTACCTATTAGCTTTTCTTTATTTTTTTAACTTTTTTGGGGGGAAAAGTATTTT
TGAGAAGTTTGTCTTGCAATGTATTTATAAATAGTAAATAAAGTTTTTACCATTAAAAAATAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2422/6881

FIGURE 2229

MQRARPTLWAAALTLVLRLRGPPVARAGASSGGLGPVVRCEPCDARALAQCAPPPAVCAELVREPGCGCCLTCAL
SEGQPCGIYTERCGSGLRCQPSDEARPLQALLDGRGLCVNASAVSRLRAYLLPAPPAPGNASESEEDRSAGSVE
SPSVSSTHRVSDPKFHLHSKI I I I I KKGHAKDSQRYKVDYESQSTDTQNFSSSESKRETEYGPCRREMEDTLNHLK
FLNVLSPRGVHIPNCDKKGfYKKKQCRPSKGRKRGFCWCVDKYGQPLPGYTTKGKEDVHCYSMQSK

WO 2004/030615

PCT/US2003/028547

2423/6881
FIGURE 2230A

GCGGGTGTTGCGCTACGTCACTGGGGCGCTACAGTACCTGGAGCTGGGCAGTCTTCTCATCAGAGTGGGGACTAA
TAACAGTGACCTCCCCGCCAGGTCTGTGTGTGCGGGCTGAAGAAGGATGATGATTATTTCCACCTTCTGAGA
GACAAAGACCAACGAGCCACCACAGCCACCAGTCCCAGAACCCGCCAATGCTGGGGAACGGAAAATGAGGGAGTT
CAACTCTGGCCCTCACAATCCAGTGGAGGAGACGAACTCATCTGCCTCTGTCCCTCTGGGCACGCTTCATGCCA
GGTGCATCTGTGGACAGGGGCCATGCTCCTGGGCTTCCAAAGTTGGAGAAAGCTGCCAGGCTCAGAGCCACCTAA
GCTGAAGATTCCCTTGAGAACAAAGTACTGTCTGTGGTTTCATGGCCTTTCTTCCATTTGTGGTTCTTGTGAAGT
GGAATTTAAATGACATCTTATCAAGATGGATAAACCTTAGTTTCCCAGTGTCTGGAATATAGAAAATGGATGGACA
AGTAAATCCCACTCATCACCCTAGTCCAGGCATGGGGACCTCAACACACCTGAGCCCCAGACATCACCTTTCAT
TCTGGACCTACCATGAAAGACTTCTGAATCCAGGAAGAGAGACTGACTGGGCAACATGTTGTTTCAGAAACAGGAC
CTTGCCCTGTCAATTTAGGATGGAGTTCAGTGGTCCAATCATGGCTCATTGTAGCCTCAAACCTCCAGGCTCAAGC
AATCCTACCATGTGAGCCTTCCCAGTAGCTGGGACTACAGCTGGATCTACCATGAAAGACTTCTGAATCCAGGAA
GAGAGACTGACTGGGCAACATGTTATTCAGGGTCTCCCTCTCTGTCCAAGGCTGGAGTGTAGTAGTGTATCAC
AGCTGACTGCAGCCTCAACCTTCCAGGCTGAAGCGATCTCCCATCTCAACCTCCCAGTGGCTGAGACTATAGG
TGCTTGCCACTATGCCAACTAATATTTGGAATTTCTATACGTGGATTCCAGAGGGGTGACAGCGAAACGTGA
GACCATCCAGTTGCAGAAAAACAAGCTTAACACGCCCACTGATTCTACATTATGCCCTACCTCCCGGCAGCCTC
TCCAGGCCCAGAACTTTCTCCAGTCAGCCTCCACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCATA
CCCTACCTCACGGCAGTCTCTGCAGATGAGGCTACTGCCTCACACAGCCTCCACAGGCACAGCTCCACCGTTAC
AATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAGCTTTCTCAAGTCGACCTCAC
AGGCCAGCTCATGCTTCTTGGCAGCCTCTCCAGGCCAGCTCCTGCATCTTGGCAGCCTCTCCAGGCCAGCCT
CTGCCCTCTGTGAGCCTCTACAGTCCCAACATCTGCCTCACAGCAGATTCTTCAGGCCAGTATCTGCCTCACTG
TGGACCACCCAAGCCAAGCTCCCAACCTTTCAGCAGCTTCTACACACCCAGCTCCTGCCACCCAGTGGCCTCTTT
AGGCCAAGCTCATGCCTCACAAGGGCCTTTCAGGCCCAACTTTTGTCTCATGGCAACCTTCCCTGGCCACATTC
CTGCCTGTCTCCCAGCAGCCTAGACAGGCCAGGTCTTGCCCTCACACTGGCCTGTCTACATCCAGCTCTTGCCCTC
ACGGTGGCCTCTCCAGGCCAGCTCCTGTCCAGGACGTCTCTCCAGGCCAAAACCTTCTCAAGTCAGCCTCT
CTAGTCCCAACTGCTGCCTCCTGGTGGCCTATGAAGGCCCAAAATCTCCTCAAGTTGACCTCTCCAGGCCAGCT
CCTGCCTCCTGTGAGCGTCTACAGGCCCAACCTCTGCCTCATGGGGCTTCTCCAGGCCAGCTCTTCTCTGGG
CTGAGTCTACAGGCACAACCTGCTGCCTCACAACAGCCTTTTTTGGCCAGTTCTGTCCAGCTCACAGCGACCAA
TGTAGGCCCAAACTTCTCAAGTCAAACCTCTCCAGGCCTGCCTTCTTCTGGTGGCATGAACAGGCCAGCTTT
GACTTGAGAACAGCCTCTGCAGGCCCTGTCTTGCCCTCCAGGGGCTTCTCCAGGCCAGCTCTTGCCCTCATGGC
GGCTGCCCCAGGCCAAGTTTCTGCCTGCCTGCCAGCAGCCTCAACAGGCACAGCTCTTCCCTCACAGTGGCCCAT
TTAGGCCCAACTCATGACTGTGCGGCCATTTCCAGGCCTAGTGCTGCCTCCTGGCTGACTCTTGAAGCCCAAAA
CCTTCTCAAATCAGCCTTTTGCCCAACTTCTGTCTACTGTGCGACTCTACAGGCCAGCCTCTGCCTCACAGTGA
CCCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTACAGCAGCCTCTACGGGCC
CAGCTCCTGCCTTGCAATGGCCTCTTTAGGCCAAGCTCATGCCCCACGGCGACTTTTCCAGGCACAGCTTTTGCC
TTTTGCAGCCTGTCCAGGCCAGAATGTCCTTAACCTGGCGTCTCCAGGACGAGCTCATCTCCAGTGCCTCTA
CAGGCCCGTCTCCTGCCTCACAACAACCTCCTTTGGTCCAACCTCTGCTGAGCTGCTTGGCAGCCTCTGTAGGCC
ACAGAGTTCTTAAAGTAAAGCTTTCCAGGCCACCTTCGGCCTCCCGGCAGCCTCAGCAATCAAACCTATTCCCTC
ACTGCGGCCACCGAAAGCCAAGTTTCTCCCTGCCTCACAGCATCTCCGAAAACCTGAGCATTTCCTCACGGTGG
CCTCCCCAGGCCACGAATCTGCCTGCCTCCCAGGCAGCTGCTGCCTCACAATGGTCTCTTTAGGCCAGCTCTTG
CTAAAGAGACAGACTCTCCAGGCACAGCTCTTGCCCTCTGGCAGGCTCTGCAGGCCCAAACTTCTCCAAAGTTGGC
CTCTCCTAACTCAGCTCCTGCCTCATGTGCGCCTACACAGGCCAGACTCTTACCACACAGTAGACCCTCCAGGC
CCACCACTTGCCCTGAGCATAGCCTCCTAAGGCCAAGCTCCTGCCTTTCCGGCAGCCTCTACAGGCCAGCTCCTGC
CTCGCAATTGCCTTTGTAGGCCAAGATCATGCCGGAAGTGGCCTTTCTAGCCTAACTTTTGCTTTTGACGCA
TACTCCGGTCCCAAACTTCTCCAGTCAGCCAGTCCAGGCCAAGCTCTTCTCCAAAGGCTTCTGCAGGCCAA
AATCGTCTGAAGTCACCTCTGCAGGCCAGCTCCTGCCTCCAAGTGTGTGTAGGCCAAGCTAATGCCTCACA
GCACACTTTCCAGGCTGAGCATTTCTTTTGTGCATCCTCTCCAAGCCCTGAACCTTACTCCAGTTGGCCTCTCCA
GACCAAGCTCTCCCTCCAGTGGCCTCTACAGGCCAAAATGTCTCAAGTCAGCCTCTCCAGGCCAACTCCTA
GCTACCGGTGGCTTCTGCAGGCCAAAATCGACCTCAAGTCAGCCTCTTACACCCAGCTCTTGTCTGTAAAGTGGC

WO 2004/030615

PCT/US2003/028547

2424/6881
FIGURE 2230B

CTCTGCAGGAGCAAACTGCCTCAAGTCGGCCTCTCCAGGCCAGCCTCCTGCTTCCCGAGGGCATGTACAGGCC
CAGCCTCTGCCTCACAGCAGACTCTCCATGCCCAGCTCTTCCCTGTCTGCTGCCTCTCCAGTCCAAAGCTGCGCC
TGCCTTTCGGCAACTTGTACGGGGCCAGCTCCTCCCTCACGGTGGCCTCTTTTCGCCCAACTCATGCCTCTTGCA
ACCTGCCCAAGTGTACAGTCCTGCCTCACACTGGCCTCTTGAGGCTCAGCTCATGCCTCTCGTGGCCTCAACGGG
CCCAGCCCCTGCCTGTCGGCGGCCTCTACAGGCCAGCCTCTACCTCACAGTGGGCTCTCCAGGCCACCTCTTT
CTCACCGTGGCCTCCTGGGGCAATGCTCCCCGCTCTCGGGAGCCTCTGCGGGCCAGCTCCTGCCTCCAGTGGC
CTCTGTAGGCCAAGCCCGTGCCTCAGGGCAGCCTTTCAGGCCTAGCGTTTGCTGCTTTGCATCCTCTCCAGGCT
CTGGACTTCTCCAGTCGGCCTCTCCAGGCCAGCTCTTCCCTCCCGGGCGCCTCTGCAGGCCAGACTGTTGTCA
AGTCGGCCTGTCCAGGGCCAGCTCCTGCCTCCCGGTGCCCTCTGCAGGCCCAAGTCGTCTCAAGTCGGCCTCCC
CAGGCCAGCTCCGGCCTCTCGGGCGCCGCTCCAGGTGCAAAAGTTCTCGAGTCAGCCTCTCCAGGCCAGCTC
CTCCTGCCTCCCAGCGGCCTCTTTCGGGCCAGCCAGCTCATGCCTCCCGGTGCGTCTCTAGGCCCGACTCCGG
CCTCCCAACAACCTCTTTGGACTCAGCTCCTGCCTCTCGAAGGCCTGCACGGGGCCAGCCTCAGCCTCACAGCGG
ACTCTCCACGCCAGCTAGCTCTCGCCTCACTGCGGCCTCCCCAGTCGAAAGCTCCTGCCTTTCGGCCGCTTTGG
CAGGCCAGCTCCTGCCTGCCAGTGGCCTTTTAGGCCAGCTCATTCCTCACAACGGCCTTTCAGGCCCGTT
TTTCCCTTCCGGCAGCCTTTTGGCCTCTAATTTGTTTATCTTTTGTGTATAAATCCCAAAATATGGAATTTTGA
ATATTGCTACCATT

WO 2004/030615

PCT/US2003/028547

2425/6881
FIGURE 2231

MLLPGLSLRPRTFSSQPLQTKLMTHNGLFRPIPYLTAVSADEPTASQQPPQAQLHRYNGLFRPSSCLPAFSPGP
ELSQVDLTRPSSCFFAASPGPAPASWWPLQAQPLPPVGLYSPNICLTADSSGPASASLWTPQAKLPTFQQLLHTQ
LLPPSGLSRPSSCFTRAFAGPTFVSWQPSLARFLLVSQQPRQAQVLPHTGLSTSSSCLTLASPGPTPVPGRHLRA
QNLLKSDSLVPTAAFWWPMKAQNLLKLTSPGPAPASCQHLQAQPLPHGVFSRPTSSSWLGLQAQLLPHNSLFWPS
SCPAHGGQCRPKTSSSQTLQAHLLLPGGMNRP SFDLRTASAGPALASQGLFPGPALASWQLPEAKFLLACQQPQQ
AQLLPHSGPFSPNS

WO 2004/030615

PCT/US2003/028547

2426/6881
FIGURE 2232A

GGGAAGCGCGCCGCGCACCTCATGGTTCCGGGGACAGTTAGGGCGGCGGATGGAGGTCAGCGGTGGTGCTCGCTG
CGGTTTGAATCACTTGCTAGGAGTCTTGCTCTCTGCCACCCAGGACATCATGGCAGCTCACCTGGTAAAGCGA
TGCACGTGCTCCTGAGAGAAGCTGCTCGTCAGGCCCCCTGCCATGGCTCCAGTTGGCCGACTGAGACTTGCTGG
GTAGCCCATAAAGACTCTGACTTCTCAGCCACCTCACCCATTTCCACCTCCCAGGTTCTTTGATGGAGCCGGTG
GAGAAGGAACGAGCATCTACTCCCTACATAGAGAAGCAGGTGGACCACCTCATCAAGAAGGCCACAAGGCCAGAG
GAGCTCCTGGAGCTACTTGGTGGCAGTCACGACTTGGACAGCAATCAAGCAGCAATGGTACTTATCCGGCTCTCT
CACTTGCTGTCTGAGAAGCCAGAAGATAAAGGCTTGCTCATACAGGATGCCCACTTTTCATCAACTTCTCTGTCTG
CTCAACAGTCAGATTGCCTCGGTCTGGCATGGTACCCTCTCGAAGCTGCTGGGAAGCCTGTATGCTCTGGGCATC
CCCAAGGCCTCCAAGGAGCTGCAGTCGGTGGAGCAGGAGGTCCGCTGGCGCATGCGGAAGCTCAAGTACAAGCAC
CTGGCCTTCTGGCAGAGTCTGTGCCACCCTCTCACAGGAGCAGCACTCGCAGGAGCTGCTGGCTGAGCTGCTC
ACACACCTGGAAAGGCGTTGGACAGAAATTGAAGATTCCCACACATTAGTGACCGTCATGATGAAGGTGGGACAC
CTCTCGGAGCCACTAATGAACCGCTTGAAGACAAGCAGTCTTGAACAGAGCGCAGGACATCACCTGCCCCAC
CTGTGCAGCGTACTTCTGGCTTTTGCGCGTCTGAACTTCCATCCAGACCAAGAGGATCAGTTCTTCAGCCTGGTA
CATGAGAAGCTGGGGTCAGAGCTGCCAGGCCTGGAGCCAGCCCTGCAGGTGGACCTGGTGTGGGCCCTGTGTGTG
CTGCAGCAGGCACGGGAAGCAGAGCTGCAAGCCGTCTCCACCCTGAATTTACATCCAATTTCTAGGGGGCAAG
TCTCAGAAGGATCAGAACACCTTCCAGAAGCTGCTCCACATCAACGCCACTGCCCTGCTGGAGTACCCCGAGTAC
TCGGGTCCCCITCTGCCTGCCTCGGCTGTGGCCCCCTGGGCCCTCAGCCCTTGACAGGAAGGTGACCCCCCTGCAA
AAGGAGCTGCAGGAGACGCTGAAGGGGCTGCTGGGGAGCGCCGACAAGGGCAGCCTCGAGGTGGCCACGCAGTAT
GGCTGGGTGCTGGATGCTGAGGTGCTGCTGGACAGTGACGGCGAGTTTCTGCCCGTAAGGGACTTTGTGGCACCT
CACCTTGCCAGCCAACTGGGAGCCAGTCACCACCTCCAGGGTCTAAGAGGCTAGCGTTCTTGCGGTGGGAGTTT
CCCAACTTCAACAGCCGAAGCAAGGACTTGCTGGGTGCTTTGTTCTGGCCCCGGCGACACATAGTGGCTGCAGGC
TTCTGTATAGTGGACGTCCCATTTCTATGAGTGGCTGGAATCAAGTCTGAATGGCAGAAAGGCCCTACCTCAAG
GACAAGATGCGCAAAGCGGTGGCTGAGGAGCTGGCCAAGTGAATTTGTGCCAGCAGCATGGACTGCGTGCCTCTCC
GCCGGAGGTCTAGCTGTGGGCGGCCAAGAAGGGTCAACCCTTGAGGACAAACCTCTGTGCAGGACCTTGCCAGAG
TGGGGAGGGTGGCCAGCCACTCTGAGGGACAGAACGTCTCTGTGTATAATAAACCTTTAATTTTGGTGTGGAA
CCCCTGGGGCCTTCCCAGGCTTGGTCACCTCTGCACTGTGCACTTGTCTGTCTGCTTTGTTGAGCAGGGCGT
GGTTCTCCAGTCTGCCCTGTGCACTCCCCCGCCACGCCAGCCCAAGAGGGCTGCTTTAGGGACAGACCTGGGTT
GTTACCTGCCGTGCTCTCTCCAGCTTCTTCCCTCCATGAGTGCTTATTCACATATGCCGGCCTCTTGCGTAGGGGT
CTGTATCAGCCCCAGCAGGCAGGTGGAGTCTTAGAATTCTGAACCTCCAGAGCAGAGGAGCTTCCCAGGGAAGCT
GATTGGAGATTCACTGTCATGGCTGGGGGTTCTGATGGAGCTGTGGCTACTGAACCACAGCCATCCTGGGAGGCTT
TCTCCCATCAGTTGTCTCACACTTAGCTGAGTGAAAGGCACCTGACAGCATGTGGTGACAGGTGATGTGAGGGC
TGGGTGAGCACTTGGGAGGCGCTGGCTCTGGGAGAGGAGAAAGATCCCACCTTGGCTGACACCACGGCACCAAGAGC
CAAATCCATCGTTGTCTTACCACCTTGACCAGAGCCTTGTGCTGTCATCTAGGAACTGGCTGCCCCAAACAGGA
CCCTGGCAGCCTCCCTGCTGCGGGGATTACCAGGTGCTGGGAGGCAACAAGCTTTCTACCTTCCAGCCTCTC
CTTAGAGACACCTATTGGCAGAACCTGACTAAATAGCAGTCAGGGAACCTGGGTTGCCTCCAGCCATACAGAACAG
AGAGTAGGACAGTGGGGTGGAGCTGAGATGGAGAGGCCACAGCCCTCAGCACTGTAGGCTCCCAACCTTAGGCT
GTTTCCCCAAAAAGAAAAAGTCTAGTCACTGCTCTGATGCTTGGCCACTCACCCAAGCATTGGGGTAGTTGTGC
TGGCTTCACTGGGCACCATCAGGCACACCCAGCCTGTAGTTTTTGTATATTACCTAAGTCGGCCAGGTGTGG
TGGGATCAGCCTGTAATCCCAGCACTTAGGGAGGCTGGGGCGGGCGAATCGCCTGAGGCCAGGAATCAAGACC
AACCTGGCCAACATTGTGAACCCCTGTCTCTACTAAAAATATAAAAAATTAGTCGGGCATGATGACAGGCACCTGT
AATCCCAGCTACTCAGGAGGCTGAGGCAGGTGAATCACTTGAACCCGGGAGGTGGAGGCTGCAGTGAGTTAAGAT
TGTGCCACTGCACTCCAGCCTGGGTAACAGAGCAAGACTCTGTCTCAAAAAATATATATGTGTGTGTGTGTGT
GTATATATATGTACATGTGTATATAAGTATATATGTGTGTATATATGTATATATACAGTATATACACACACACC
CCTAAGTCATGATTTTGGAGCAATTGTAAGTGGTGTAGTGCTTAATTTTGGCATTACACATTGATTGTTAGCAT
ATAGAAATGGGATTGATTTTATGTGATCTTGCTAAACTTTATGCATTTTAAAAATTCCTTTGGATTTCCTATGT
AGATATTTATGTCTGAAAACAGGAATGTATTTATCCTTTCAAATCAATATGCTTTTATTTTGTATTTATGAC
CACTTCATTAAATATAATTACATGCCATACACTTACCCATTTAAATGTATAATTAGGCCAGGTGTGGTGGC
TCACGTCTGTAATCCCAGCAGTTTGGGAGGCCAAGGCCCTCAGATCTTGAGCCCAGGAGTTCAAGACCACCTTG

WO 2004/030615

PCT/US2003/028547

2427/6881
FIGURE 2232B

GCAACAGGCAAAACCCCTGTCTCTATTTTTTTAAATACAAGAATTAGCCGCAGTGGCACGCACCTGTCTGTCCTCCAGC
AACCCAGGAGGCTGAGGTAGGAGGATCACTTAAGCCTGGGAAGTCAAGCCTGCAGTGAACCATGATAGCACCCT
GCAGTCCAGCCTGGGCGACAGAGTGAGACCCCATCTCGAAAACAAAATGTATAATTCAGTGGTTTTTAGTCTCT
TTGCAGATACATGCAACCATCACCACAATTTGCACATTTTCTAAGCCTCATATACTGATGTGATATTTGGTGTT
TTGTGACTGGCTTCATTTACTTAGCATATTGTTTTTCATGTTTCATTCATGTCGCATGTATGAGTATTCATTCCTT
TATTTGGCTGAATAATATTCCATTATAGTTTGTGCCACATTTTGTATCCATTATCCATTGATGGACATGTGG
ATTGTTTCCACCTTCTGGATAATATGAAGTGAACAGTTTGGATATTTTGTCCCCTCCAAATCTCATGAAATAGG
ATCACCAGTGTGGAGAATGGGGCCTGTAGGAAGTGTGGATCATAGGAACATCTGTCATAAATGGCTTGGTG
CCATCCTTGTAATGAGTGAGTTCTTGCTCTATATTAGTTCACTTGAAAGCTGGTTGTTGGGAACCTCGCCCTAT
CTGTTCTGCCCTCTCTCGTCATGTGACATGCCTGCTCCTTGTTTACCTTCTGTGATGAGTAAAAGCTTCCTAAGG
CCTTCCCAGGAGCCAAGCAGATGTCAGTACCATGCTTGTACAGCCTGCAGAACTGTGAGCCAAATAAACTTCTTT
ATAAATT

WO 2004/030615

PCT/US2003/028547

2428/6881
FIGURE 2233

MAAHLVKRCTCLLREAAHQAPAMAPVGRRLAWVAHKTLTSSATSPISHLPGSLMEPVEKERASTPYIEKQVDHL
IKKATRPEELLELLGGSHDLDNQAAMVLIRLSHLLSEKPEDKGLLIQDAHFHQLLCLLNSQIASVWHGTL SKLL
GSLYALGIPKASKELQSVEQEVWRMRKLKYKHLAFLAESCATLSQEQHSQELLAELLTHLERRWTEIEDSHTLV
TVMMKVGHLSEPLMNRLEDKHVLNRAQDITLPHLCVLLAFARLNFHPDQEDQFFSLVHEKLGSELPGLEPALQV
DIVWALCVLQQAREAELOAVLHPEFHIQFLGGKSQKDQNTFQKLLHINATALLEYPEYSGPLL PASAVAPGPSAL
DRKVTPLQKELQETLKGLLGSADKGSLEVATQYGWVLD AEVLLDSDGEFLPVRDFVAPHLAQPTGSQSPPPGSKR
LAFLRWEFPNFNSRSKDLLGRFVLARRHIVAAGFLIVDVPFYEWLELKSEWQKGAYLKDKMRKAVAEELAK

WO 2004/030615

PCT/US2003/028547

2429/6881
FIGURE 2234

GGCACGAGGCCCGGGTCGAGCATGTAGCGGCTGCTGGCGGCGGGGCTCCCGGGGCGGGCCGGGCGGGCCGCGGGA
GCCGCACGCGGCGATATCGAAGAGGAGGGCAAGAAGGGCAAGAAGCCTGGAATTGTCTCGCCATTTAAACGAGTA
TTCCTAAAAGGTGAAAAGAGTAGAGATAAGAAAGCCCATGAGAAGGTGACAGAGAGGCGCCCTCTGCACACTGTG
GTGTTGTCATTGCCTGAGCGCGTCGAGCCAGACAGACTGCTGAGCGACTATATTGAGAAGGAGGTAAAGTATTTA
GGTCAGTTAACGTCCATACCAGGATACCTGAATCCCTCCAGTAGGACTGAAATCCTGCATTTTCATAGACAATGCA
AAGAGAGCCCAACAGCTTCCGGGACACTTGACTCAGGAGCAGATGCTGTGCTCAGCCTGTCTGCGTACAACGTC
AAGCTGGCCTGGAGGGACGGGGAGGATATCATCCTCAGGGTGCCCATCCATGACATCGCCGCCGTCTCCTATGTT
CGGGATGACGCTGCACACCTGGTGGTCCTGAAGACAGCCAGGACCCAGGGATCTCCCCAGCCAGAGTCTGTGT
GCGGAAAGTTCCAGAGGCCCTCAGTGCAGGCTCCCTGTGCGAGAGTGCAGTTGGGCCCGTGGAGGCATGCTGCCTG
GTCATCCTGGCTGCAGAGAGCAAGGTGCTGCGGAGGAGCTTTGCTGTCTGCTAGGCCAGGTCTTCCAGGTTGTT
TACACGGAGTCCACCATCGACTTTCTGGACAGAGCGATATTTGATGGGGCCTCTACCCCGACCCACCACCTGTCC
CTGCACAGCGATGACTCTTCTACAAAAGTGGACATTAAGGAGACCTACGAGGTGGAAGCCAGCACTTTCTGCTTC
CCTGAATCTGTGGATGTGGGTGGTGCATCACCCACAGCAAGACCATCAGTGAGAGCGAGCTGAGCGCCAGCGCC
ACTGAGCTGCTGCAGGACTACATGCTGACGCTGCGACCAAGCTGTATCACAGGAGATCCAGCAGTTTGCAGCA
CTGCTGCACGAGTACCGCAATGGGGCCTCTATCCACGAGTTCTGCATCAACCTGCGGCAGCTCTACGGGGACAGC
CGCAAGTTCTGCTGCTTGGTCTGAGGCCCTTCATCCCTGAGAAGGACAGCCAGCACTTCGAGAACTTCTTGGAG
ACCATTGGCGTGAAGGATGGCCGCGGCATCATCACTGACAGCTTTGGCAGGCACCGGGCGGGCCCTGAGCACCACA
TCCAGTTCCACCACCAATGGGAACAGGGCCACGGGCAGCTCTGATGACCGGTGCGCACCCCTCAGAGGGGGATGAG
TGGGACCGCATGATCTCGGACATCAGCAGCGACATTGAGGCGCTGGGCTGCAGCATGGACCAGGACTCAGCATGA

TGGACAGTGGATGGGGGGGCACCCACACCTTCCGCGCAGTCGTCATAGGCCTTCCCAGAAGGAGCTGCCCAGACC
TGCGTGTGAGCCCTTGGTGGTGGCCAGGGAGAGGCGCCCGGTGAGATGGCCCCGGGCGGGCCAGGTCTCTACT
GTGAAGGAGCAGGGAGCTGCCGAGGGACACGAGCCTCAGTGCAGGGGTGGAAGGCTCTTTGCCTTGTCACAGGG
CTCAGCCAAGCCCTGCAGTGTGTCCCGCTCGGGGAGGGCCCGGCCGAGCGGGCAGGGAGAGCCAGTCTGTGCGG
CTGGGCCCTTGGACGGCTGTGAGTTTGCACATGATGTTCTATTGTAACCTCAGAGACCTTAAAAAGAAGTTT
ACTGCAATGTGAATAATTTAAAAA

WO 2004/030615

PCT/US2003/028547

2430/6881
FIGURE 2235

MEEEGKKGKKPGIVSPFKRVFLKGEKSRDKKAHEKVTEERRPLHTVVLSLPERVEPDRLLSDYIEKEVKYLGQLTS
IPGYLNPSSRTEILHFIDNAKRAHQLPGHLTQEHDVLSLSAYNVKLAWRDGEDIILRVPIHDIAAVSYVRDDAA
HLVVLKTAQDPGISPSQSLCAESSRGLSAGSLSESAGVPVEACCLVILAAESKVAAEELCCLLGQVFQVYTEST
IDFLDRAIFDGASTPTHHLSLHSDDSSTKVDIKETYEVEASTFCFPESVDVGGASPHSKTISESELSASATELLQ
DYMLTLRKLSSQEIQQFAALLHEYRNGASIHEFCINLRQLYGDSRKFLLLGLRPFIPKDSQHFENFLETIGVK
DGRGIITDSFGRHRRALSTTSSTTNGNRATGSSDDRSAPSEGDEWDRMISDISSDIEALGCSMDQDSA

WO 2004/030615

PCT/US2003/028547

2431/6881
FIGURE 2236

TGGGGTTCTGAACCAGCAAGACAAGCGGGCATTGGCCACAGCAGCGCGAGGCGGGCACGGGGTATTGTCCGGCTCC
GGCGGGCGGGTTCGGTGCTGCGAGAGCGGCGGGCGGGCGGGTTCGGCAGCGGGAGGGCGCGGGCCGAGCGGA
GGCGGAGTCGGCGCCGAGAACATGGCTGGAGGCAAAGCTGGAAAGGACAGTGGGAAGGCCAAGGCTAAGGCAGTA
TCTCGCTCACAGAGAGCTGGGCTACAGTTTCCTGTGGGCCGCATCCACAGACACTTGAAGACTCGCACCACAAGC
CATGGAAGGGTGGGTGCCACTGCTGCCGTGTACAGTGCTGCGATTCTGGAGTACCTCACTGCAGAGGTGCTGGAG
CTGGCAGGTAATGCTTCTAAGGATCTCAAAGTAAAGCGTATCACTCCGCGTCACTTGCAGCTTGCAATCCGTGGT
GATGAAGAGTTGGATTCTTATCAAGGCTACCATAGCTGGGGGTGGTGTGATCCCTCACATCCACAAATCTCTG
ATTGGAAAGAAGGGACAGCAGAAAAGTCTTAGAGGGATGCTTTAACCAACCCTCTTCCTCCCCGTATTGTACT
GTAAGTGGGACAGAAGAAATAATGGGGATATGTGGAATTTTTAACACAGTTAAATGGAAAAGCATAGACAATTA
CTGTAGACATGATAAAAGAAACATTTGTATGTTCTTAGACTCGAAGTTTGATAAAAGTACCTTTTCATGTGGTGA
CAGTTGTGTGTTGATTGGCTAGGTTTCTCCCGTGTGTTTATACAAAATGGAATTGATAAACCATTTTTTACAA
AATTAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2432/6881
FIGURE 2237

MAGGKAGKDSGKAKAKAVSRQRAGLQFPVGRIHRHLKTRTTSHGRVGATAAVYSAAILEYLTAEVLELAGNASK
DLKVKRITPRHLQLAIRGDEELDSLKATIAGGGVIPHIHKSIGKKGQOKTA

WO 2004/030615

PCT/US2003/028547

2433/6881
FIGURE 2238

GTTTTGCAGACGCCACCGCCGAGGAAAACCGTGTACTATTAGCCATGGTCAACCCCACCGTGTTCTTCGACATTG
CCGTCGACGGCGAGCCCTTGGGCCGCGTCTCCTTTGAGCTGTTTGCAGACAAGGTCCCAAAGACAGCAGAAAATT
TTCGTGCTCTGAGCACTGGAGAGAAAAGGATTTGGTTATAAGGGTTCCTGCTTTCACAGAATTATTCCAGGGTTTA
TGTGTCAGGGTGGTGACTTCACACGCCATAATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAAATTTGAAGATG
AGAACTTCATCCTAAAGCATAACGGGTCTTGGCATCTTGTCCATGGCAAATGCTGGACCCAACACAAATGGTTCCC
AGTTTTTCATCTGCACTGCCAAGACTGAGTGGTTGGATGGCAAGCATGTGGTGTTTGGCAAAGTGAAAGAAGGCA
TGAATATTGTGGAGGCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACT
GTGGACAACTCGAATAAGTTTGACTTGTGTTTTATCTTAACCACCAGATCATTCCTTCTGTAGCTCAGGAGAGCA
CCCCCTCACCCCATTTGCTCGCAGTATCCTAGAATCTTTGTGCTCTCGCTGCAGTTCCTTTGGGTTCATGTTT
TCCTTGTTCCCTCCCATGCCTAGCTGGATTGCAGAGTTAAGTTTATGATTATGAAATAAAACTAAATAACAATT
GTC

WO 2004/030615

PCT/US2003/028547

2434/6881
FIGURE 2239

MVNPTVFFDIAVDGEPLGRVSFELFADKVPKTAENFRALSTGEKGFYKGSCFHRIIPGFMCQGGDFTRHNGTGG
KSIYGEKFEDENFILKHTGPGILSMANAGPNTINGSQFFICTAKTEWLDGKHVVFGKVKEGMNIVEAMERFGSRNG
KTSKKITIADCGQLE

WO 2004/030615

PCT/US2003/028547

2435/6881
FIGURE 2240A

GCAGTTGTGAAAACTTCAGGACAAAAATGTTTCATTTAAGGACTTGTGCTGCTAAGTTGAGGCCATTGACGGCT
TCCCAGACTGTTAAGACATTTTCACAAAACAGACCAGCAGCAGCTAGGACATTTCAACAGATTCCGGTGCTATTCT
GCACCTGTTGCTGCTGAGCCCTTTCTCAGTGGGACTAGTTCGAACTATGTGGAGGAGATGTACTGTGCTTGGCTG
GAAAACCCCAAAAGTGTACATAAGTCATGGGACATTTTTTTTTTCGCAACACGAATGCCGGAGCCCCACCGGGCACT
GCCTACCAGAGTCCCCCTTCCCCTGAGCCGAGGCTCCCTGGCTGCTGTGGCCCATGCACAGTCCCTGGTAGAAGCA
CAGCCCAACGTGGACAAGCTCGTGGAGGACCACCTGGCAGTGCAGTCGCTCATCAGGGCATATCAGATACGAGGG
CACCATGTAGCACAGCTGGACCCCCCTGGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGTGACATTATC
TCATCCACAGACAACTTGGGTTCTATGGCCTGGATGAGTCTGACCTCGACAAGGTCTTCCACTTGCCCACCACC
ACTTTCATCGGGGGACAGGAATCAGCACTTCTCTGCGGGAGATCATCCGTGCGCTGGAGATGGCCTACTGCCAG
CATATTGGGGTGGAGTTTCATGTTTCATCAATGACCTGGAGCAGTGGCAGTGGATCCGGCAGAAGTTTGAGACCCCT
GGGATCATGCAGTTCACAAATGAGGAGAAACGGACCCCTGCTGGCCAGGCTTGTGCGGTCCACCAGGTTTGAGGAG
TTCTTACAGCGGAAGTGGTCTCTGAGAAGCGCTTTGGTCTAGAAGGCTGCGAGGTACTGATCCCTGCCCTCAAG
ACCATCATTGACAAGTCTAGTGAGAATGGCGTGGACTACGTGATCATGGGCATGCCACACAGAGGGCGGCTGAAC
GTGCTTGCAAAATGTTCATCAGGAAGGAGCTGGAACAGATCTTCTGTCAATTTCGATTCAAAGCTGGAGGCAGTAT
GAGGGCTCCGGAGATGTGAAGTACCACCTGGGCATGTATCACCAGCAGGATCAATCGTGTACCCGACAGGAACATT
ACCTTGTCTTGGTGGCCAAACCCTTCCCACCTTGAGGCCGCTGACCCCGTGGTGATGGGCAAGACCAAGCCGAA
CAGTTTTACTGTGGCGACACTGAAGGGAAAAAGGTTCATGTCCATCCTGTTGCATGGGGATGCTGCAATTTGCTGGC
CAGGGCATTGTGTACGAGACCTTCCACCTCAGCGACCTGCCATCCTACACAATCATGGCACCCTGCACGTGGTTC
GTCAACAACCAGATCGGCTTCCACCCGACCCCTCGGATGGCCCGCTCCTCCCCCTACCCCACTGACGTGGCCCGA
GTGGTGAATGCCCCCATTTTCCACGTGAATCAGATGACCCCGAGGCTGTCATGTACGTGCAAGTGGCGGCC
GAGTGGAGGAGCACCTTCCACAAGGACGTGGTGTGATTTGGTGTGTTACCGGCGCAACGGCCACAACGAGATG
GATGAGCCCATGTTTACGCGAGCCGCTCATGTACAAGCAGATCCGCAAGCAGAAGCCTTGTTTACAGAAGTACGCT
GAGCTGCTGGTGTGCGAGGGTGTGGTCAACCAGCCTGAGTATGAGGAGGAAATTTCCAAGTATGATAAGATCTGT
GAGGAAGCTTTTGCCAGATCTAAAGATGAGAAGATCTTGACATTAAGCACTGGCTGGACTCTCCCTGGCCTGGC
TTCTTCCACCTGGACGGGCAGCCAGGAGCATGTCTGCCCTTCCACGGGTCTGACGGAGGATATTCTGACACAC
ATCGGGAAATGTGGCTAGTTCTGTGCTGTGGAAAACCTTACTATTTCATGGAGGGCTGAGCCGGATCTTGAAGACT
CGTGGGGAATGGTGAAGAACCAGGACTGTGGACTGGGCTCTAGCGGAGTACATGGCGTTTGGCTCGCTCCTGAAG
GAGGGCATCCACATTCGGCTGAGCGGCCAGGACGTGGAGCGGGGCACATTCAGCCACCGCCACCATGTGCTCCAT
GACCAGAATGTGGACAAGAGAACCTGCATCCCCATGAACCATCTCTGGCCCAATCAGGCCCCCTATACTGTGTGC
AACAGCTCACTGTCTGAGTACGGCGTGTGGGCTTTGAGCTGGGCTTCGCCATGGCCAGTCTAATGCCCTGGTTC
CTCTGGGAAGCCCAATTTGGTGAATTCACAAACACGGCCAGTGTATCATCGACCAAGTTTCATCTGCCCGGGACAA
GCCAAGTGGGTGCGGCAGAATGGCATCGTGTGCTGCTGCCCATGGCATGGAGGGCATGGGTCCAGAACATTCC
TCCGCCCGCCAGAGCGGTTCTTGCAGATGTGCAACGATGACCCAGATGTCTGCCAGACCTTAAAGAAGCCAAAC
TTGCACATCAATCAGCTATATGACTGCAATTGGGTTGTTGTCAACTGCTCCACTCCTGGCAACTTCTTCCACGTG
CTACGACGCCAGATCCTGCTGCCATTCCGGAAGCCGTTAATTATCTTACCCCCAAATCCCTGTTGCGCCACCCC
GAGGCCAGATCCAGCTTTGATGAGATGCTTCCAGGAACCCACTTCCAGCGGGTGATCCCAAGATGGCCCTGCA
GCTCAGAACCCAGAAAATGTCAAAAGGCTTCTCTTCTGCACCGGCAAGTGTATTATGACCTCACCCGGGAGCGC
AAAGCACGCGACATGGTGGGGCAGGTGGCCATCACAAGGATTGAGCAGCTGTGCGCATTTCCCTTTGACCTCCTG
CTGAAGGAGGTGCAGAAGTACCCCAATGCTGAGCTGGCCTGGTGCCAGGAGGAGCACAAGAACCAAGGCTACTAT
GACTACGTGAAGCCAAGACTTCGGACCACCATCAGCCGCGCCAAGCCCGTCTGGTATGCCGGCCGGGACCCAGCG
GCTGCTCCAGCCACCGGCAACAAGAAGACCCACCTGACGGAGCTGCAGCGCCTCCTGGACACGGCCTTCGACCTG
GACGTCTTCAAGAATTTCTCGTAGATGCTGCCTAGGGTTGCTTGGGCCACTGCCCTCTCCACACCCATGACTGCC
CCTTGCTTCTCAACTAAAGAATAGTGCCTCAGCGCTGCCACACCCACCGCCCTCCTCGCTGTGCCACCAACCCCTC
CCTCTGCTCTCATAGGAGTTAGGCTGTGCTCCCCCTCCAGTGTGCTTGGCTGCCCCACAGGCCACAGCTGCCAGG
CTCTGCTGACTTCTGAGCAGTTTTCCAGGAGGCCGGGGGAGCAGGAGGAGGAAAGGTAGCCCCCGAGGGATGTC
CTTGGGGAGGGGTGAGCTCTGGCCACAATCTCCCCACCACTCTCACCCTAGGATAGGAAGTGGCCCTTGTGT
GCTGGCTTCCGCTGTACCCAGCAAGGCACAGGCTCCTGTATTTGAGACTAGGATAGCTTCATCTTGAGCCTGAG
CCTTAGAATCTGTAGAGGAGCCTGGAGTCGGATCTAGCCATGGCTGGCAGAGGTTTCTAGGGTGGGCCCCAGCCG

WO 2004/030615

PCT/US2003/028547

2436/6881
FIGURE 2240B

TGGCGTGAAGTGAAGGATGACCCGGGGCAGCTGGCAGGAGAGAGCCTTGGCCTGACCTGGCACAGAAAGGGCAGCT
TCAGTCTCTGCAGTGTCCATTATCTGCTGTTTCCTTCGAGGGTTCCAGGCTGTGTGTGGGGCCCAAGCATGCCCCA
CCCACCCCTCCTGGGCCCAGGCAGCACCTGGAGCCCACAGAGTCTGTGTGTAGCCAGGAAGCCCCGCTCAGGTAG
CCACCACCGGGGCACTGGCTGCTCTGTCTTGGTCCTGTTAACCCTCCACCTCCTCTCTTGGACTCCCTCCCCACC
CCAACCACTCTTTCTTTCTCCTTTAACCCAATGGAGACTTTCTGATGCATCGTTTTCTTTGCTGTGCCAAAGCAG
GTCAGAAGAGGGAGAGGAGGGGCTGGGGGTGAGGGGCCAGGCCATGGCCAAGGGGCCAGCTGCCCCCTCATTATC
ACTCTGACCTTCACAGGGACAGATCTGATTTATTTATTTTGGTT

WO 2004/030615

PCT/US2003/028547

2437/6881
FIGURE 2241

MFHLRTCAAKLRPLTASQTVKTF SQNRPAARTFQQIRCYSAPVAAEPFLSGTSSNYVEEMYCAWLENPKSVHKS
WDIFFRNTNAGAPPGTAYQSPLPLSRGSLAAVAHAQSLVEAQPNVDKLVEDHLAVQSLIRAYQIRGHHVAQLDPL
GILDADLDSSVPADIISSTDKLGFGYGLDESDLDKVFHLPTTTFFIGGQESALPLREIIRRLEMAYCQHIGVEFMFI
NDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEEFLQRKWSSEKRFGLGCEVLIPALKTIIDKSEN
GVDYVIMGMPHRGRNLNVLANVIRKELEQIFCQFDSKLEAADEGSGDVKYHLGMYHRRINRVTDNRNITLSLVANPS
HLEAADPVVMGKTAEQFYCGDTEGKKVMSILLHGDAAFAGQGIVYETFHLSDLPSYTHGTVHVNNQIGFTT
DPRMARSSPYPTDVARVVNAPIFHVNSDDPEAVMYVCKVAAEWRSTFHKDVVDLVLCYRRNGHNEMDEPMFTQPL
MYKQIRKQKPVLLQKYAELLVSQGVVNQPEYEEEISKYDKICEEAFARSKDEKILHIKHWLDSWPFGFFTLDGQPR
SMSCPSTGLTEDILTHIGNVASSVPVENFTIHGGLSRILKTRGEMVKNRTVDWALAEYMAFGSLLKEGIHIRLSG
QDVERGTFSHRHHVLHDQNVDKRTCIPMNLWPNQAPYTVCNSSLSEYGVLFELGFAMASPNALVLWEAQFGDF
HNTAQCIIDQFICPGQAKWVRQNGIVLLLPHGMEGMGPEHSSARPERFLQMCNDPDVLPDLKEANFDINQLYDC
NWVVVNCSTPGNFFHVLRRQILLPFRKPLIIFTPKSLLRHPEARSSFDEMLPGTHFQRVIPEDGPAAQNPNENVKR
LLFCTGKVYYDLTRERKARDMVGQVAITRIEQLSPFPFDLLLKEVQKYPNAELAWCQEEHKNQGYDYVKPRLRT
TISRKPVWYAGRDPAAAPATGNKKTHLTELRLLDTAFDLDVFNFS

2438/6881

FIGURE 2242

GCTGCTCCCGCTCGCGTCGGTGGCGTTTTTTCCTGCAGCGCGTGCTGCGCTACTGAGCAGCGCCATGGGAGGA
CTCTGAAGCACTGGGCTTCGAACACATGGGCCTCGATCCCCGGCTCCTTCAGGCTGTCACCGATCTGGGCTGGTC
GCGACCTACGCTGATCCAGGAGAAGGCCATCCCCTGGCCCTAGAAGGGAAGGACCTCCTGGCTCGGGCCCGCAC
GGGCTCCGGGAAGACGGCCGCTTATGCTATTCCGATGCTGCAGCTGTTGCTCCATAGGAAGGCGACAGGTCCGGT
GGTAGAACAGGCAGTGAGAGGCCTTGTTCTTGTTTCTACCAAGGAGCTGGCACGGCAAGCACAGTCCATGATTCA
GCAGCTGGCTACCTACTGTGCTCGGGATGTCCGAGTGGCCAATGTCTCAGCTGCTGAAGACTCAGTCTCTCAGAG
AGCTGTGCTGATGGAGAAGCCAGATGTGGTAGTAGGGACCCCATCTCGCATATTAAGCCACTTGCAGCAAGACAG
CCTGAAACTTCGTGACTCCCTGGAGCTTTTGGTGGTGGATGAAGCTGACCTTCTTTTTTCTTTTGGCTTTGAAGA
AGAGCTCAAGAGTCTCCTCTGTCACTTGCCCCGGATTTACCAGGCTTTTCTCATGTCACTACTTTTAACGAGGA
CGTACAAGCACTCAAGGAGCTGATATTACATAACCCGGTTACCCTTAAGTTACAGGAGTCCCAGCTGCCTGGGCC
AGACCAGTTACAGCAGTTTCAGGTGGTCTGTGAGACTGAGGAAGACAAATTCCTCCTGCTGTATGCCCTGCTCAA
GCTGTCTATTGATTGGGGCAAGTCTCTGCTCTTTGTCAACACTCTAGAACGGAGTTACCGGCTACGCCGTGTTCTT
GGAACAGTTCAGCATCCCCACCTGTGTGCTCAATGGAGAGCTTCCACTGCGCTCCAGGTGCCACATCATCTCACA
GTTCAACCAAGGCTTCTACGACTGTGTCAAGCAACTGATGCTGAAGTCCCTGGGGGCCCCAGTCAAGGGCAAGCG
TCGGGGCCGAGGGCCCAAAGGGGACAAGGCCTCTGATCCGGAAGCAGGTGTGGCCCGGGGCATAGACTTCCACCA
TGTGTCTGCTGTGCTCAACTTTGATCTTCCCCCAACCCCTGAGGCCTACATCCATCGAGCTGGCAGGACAGCACG
CGCTAACAACCCAGGCATAGTCTTAACCTTTGTGCTTCCCACGGAGCAGTTCCACTTAGGCAAGATTGAGGAGCT
TCTCAGTGGAGAGAACAGGGGCCCCATTCTGCTCCCCCTACCAGTTCGGATGGAGGAGATCGAGGGCTTCCGCTA
TCGCTGCAGGGATGCCATGCGCTCAGTGACTAAGCAGGCCATTTCGGGAGGCAAGATTGAAGGAGATCAAGGAAGA
GCTTCTGCATTCTGAGAAGCTTAAGACATACTTTGAAGACAACCCTAGGGACCTCCAGCTGCTGCGGCATGACCT
ACCTTTGCACCCCGCAGTGGTGAAGCCCCACCTGGGCCATGTTCTGACTACCTGGTTCCTCCTGCTCTCCGTGG
CCTGGTACGCCCTCACAAGAAGCGGAAGAAGCTGTCTTCTCTTGTAGGAAGGCCAAGAGAGCAAAGTCCCAGAA
CCCCTGCGCAGCTTCAAGCACAAAGGAAAGAAATTCAGACCCACAGCCAAGCCCTCCTTGAGGGTTGTTGGGCCTC
TCTGGAGCTGAGCACATTGTGGAGCACAGGCTTACACCCTTCGTGGACAGGCGAGGCTCTGGTGCTTACTGCACA
GCCTGAACAGACAGTTCTGGGGCCGGCAGTGCTGGGCCCTTTAGCTCCTTGGCACCTCCAAGCTGGCATCTTGCC
CCTTGACAACAGAATAAAAAATTTAGCTGCCCCAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2439/6881
FIGURE 2243

MEDSEALGFHEHGLDPRLQAVTDLGWSRPTLIQEKAIPLALEGKDLLARARTGSGKTAAYAIPMLQLLLHRKAT
GPVVEQAVRGLVLVPTKELARQAQSMIQQLATYCARDVRVANVSAEDSVSQRAVLMEKPDVVVGTPSRILSHLQ
QDSLKLKRDSELLLVDADLLFSFGFEEELKSLLCHLPRIYQAFMSATFNEDVQALKELILHNPVTLKLQESQL
PGPDQLQQFQVVCETEEDKFLLLYALLKLSLIRGKSLLFVNTLERSYRLRLFLEQFSIPTCVLNGELPLRSRCHI
ISQFNQGFYDCVIATDAEVLGAPVKGKRRGRGPKGDKASDPEAGVARGIDFHHVSAVLNFDLPPTPEAYIHRAGR
TARANNPGIVLTFVLPTEQFHLGKIEELLSGENRGPILLPYQFRMEEIEGFRYRCRDAMRSVTKQAIREARLKEI
KEELLHSEKLKTYFEDNPRDLQLLRHDLPLHPAVVKPHLGHVPDYLVPALRGLVRPHKKRKKLSSSCRKAKRAK
SQNPLRSFKHKGKKFRPTAKPS

WO 2004/030615

PCT/US2003/028547

2440/6881
FIGURE 2244

TCTTCCTCGGCGCTGCCTACGGAGGTGGCAGCCATCTCCTCCTCGGCATCATGGCCGCCCTCAGACCCCTTGTGA
AGCCCAAGATCGTCAAAAAGAGAACCAAGAAGTTCATCCAGCACCAGTCAGACCAATATGTCAAAATTAAGCGTA
ACTGGCGGAAACCCAGAGGCACTGACAACAGGGTTCGTAGAAGATTCAAGGGCCAGATCTTGATGCCCAACATTG
GTTATGGGAGCAACAAAAAAACAAAGCACATGCTGCCCAGTGGCTTCCGGAAGTTCCTGGTCCACAACATCAAGG
AGCTGGAAGTGCTGCTGATGTGCAACAAATCTTACTGTGCCGAGATCGCTCACAATGTTTCCTCCAAGAACCGCA
AAGCCATCGTGGAAACAGCTGCCCAACTGGCCATCAGAGTCACCAACCCCAATGCCAGGCTGCGCAGCGAAGAAA
ATGAGTAGACAGCTCGTGTGCACGTTTTCTGTTTTAAATAAATGTAAAAACTGC

WO 2004/030615

PCT/US2003/028547

2441/6881
FIGURE 2245

GCTGCTCCCTGAGAACGGGTCCCGCAGCTGGGCAGGCGGGCGGCCTGAGGGCGCGGAGCCATGAAGCTGTACAGC
CTCAGCGTCCCTCTACAAAGGCGAGGCCAAGGTGGTGCTGCTCAAAGCCGCATACGATGTGTCTTCCTTCAGCTTT
TTCCAGAGATCCAGCGTTCAGGAATTCATGACCTTCACGAGTCAACTGATTGTGGAGCGCTCATCGAAAGGCACT
AGAGCTTCTGTCAAAGAACAAGACTATCTGTGCCACGICTACGTCCGGAATGATAGTCTTGCAGGTGTGGTCATT
GCTGACAATGAATACCCATCCCGGGTGGCCTTTACCTTGCTGGAGAAGGTACTAGATGAATTCTCCAAGCAAGTC
GACAGGATAGACTGGCCAGTAGGATCCCCTGCTACAATCCATTACCCAGCCCTGGATGGTCACCTCAGTAGATAC
CAGAACCCACGAGAAGCTGATCCCATGACTAAAGTGCAGGCCGAAGTAGATGAGACCAAATCATTCTGCACAAC
ACCATGGAGTCTCTGTTAGAGCGAGGTGAGAAGCTAGATGACTTGGTGTCCAAATCCGAGGTGCTGGGAACACAG
TCTAAAGCCTTCTATAAAACTGCCCCGAAACAAAACATCATGCTGTGCCATCATGTGATGCAGCCTGCCAGAGGCC
CAATGCTGGAATGGCACCATCATTCACATCAGAACTGCAGCCCCTGGAAAAGAAGAGACA

WO 2004/030615

PCT/US2003/028547

2442/6881
FIGURE 2246

CGGGATGCGGCGCGCCGCGCGTTGAACCTCCTTGGCCTGGGCGAAGCTGTGTGGACCAAGCAAGTCAGGAGTGTG
GCCATGTTTTTCTGAGCAGGCTGCCCAGAGGGCCCACACTCTACTGTCCCCACCATCAGCCAACAATGCCACCTTT
GCCCCGGGTGCCAGTGGCAACCTACACCAACTCCTCACAACCTTCCGGCTAGGAGAGCGCAGCTTTAGCCGGCAG
TATGCCACATTTATGCCACCCGCCTCATCCAAATGAGACCCTTCCCTGGAGAACCAGGGCCCAGCAGCACTGGGGC
AGTGGAGTGGGAGTGAAGAAGCTGTGTGAAGTGCAGCCTGAGGAGAAGTGCTGTGTGGTGGGCACTCTGTTCAAG
GCCATGCCGCTGCAGCCCTCCATCCTGCGGGAGGTCAGCGAGGAGCACAACTGCTCCCCAGCCTCCTCGGAGT
AAATACATACACCCAGATGACGAGCTGGTCTTGGAAGATGAAGTGCAGCGTATCAAATAAAAGGCACCATTTGAC
GTGTCAAAGCTGGTTACGGGGACTGTCTGGCTGTGTTTGGCTCCGTGAGAGACGACGGGAAGTTTCTGGTGGAG
GACTATTGCTTTGCTGACCTTGCTCCCCAGAAGCCCGCACCCCCACTTGACACAGATAGGTTTGTGCTACTGGTG
TCCGGCCTGGGCCTGGGTGGCGGTGGAGGCGAGAGCCTGCTGGGCACCCAGCTGCTGGTGGATGTGGTGACGGGG
CAGCTTGGGGACGAAGGGGAGCAGTGCAGCGCCGCCCACGTCTCCCGGGTTATCCTCGCTGGCAACCTCCTCAGC
CACAGCACCCAGAGCAGGGATTCTATCAATAAGGCCAAATACCTCACCAAGAAAACCCAGGCAGCCAGCGTGGAG
GCTGTAAAGATGCTGGATGAGATCCTCCTGCAGCTGAGCGCCTCAGTGCCCGTGGACGTGATGCCAGGCGAGTTT
GATCCCACCAATTACACGCTCCCCCAGCAGCCCCTCCACCCCTGCATGTTCCCGCTGGCCACTGCCTACTCCACG
CTCCAGCTGGTCACCAACCCCTACCAGGCCACCATTTGATGGAGTCAGATTTTGGGGACATCAGGACAGAACGTG
AGTGACATTTTCCGATACAGCAGCATGGAGGATCACTTGGAGATCCTGGAGTGGACCCTGCGGGTCCGTACATC
AGCCCCACAGCCCCGGACACTCTAGGTTGTTACCCCTTCTACAAAATGACCCGTTTCATCTTCCAGAGTGCCCG
CATGTCTACTTTTGTGGCAACACCCCCAGCTTTGGCTCCAAAATCATCCGAGGTCTGAGGACCAGACAGTGCTG
TTGGTGACTGTCCCTGACTTCAGTGCCACGCAGACCGCCTGCCTTGTGAACCTGCGCAGCCTGGCCTGCCAGCCC
ATCAGCTTCTCGGGCTTCGGGGCAGAGGACGATGACCTGGGAGGCCTGGGGCTGGGCCCCTGACTCAAAAAAGTG
GTTTTGACCAGAGAGGCCAGATGGAGGCTGTTTATTCCCTGCAGTGTGGCATTGTAAATAAAGCCTGGCACTT
GCTGATGCG

WO 2004/030615

PCT/US2003/028547

2443/6881
FIGURE 2247

MFSEQAAQRAHTLLSPPSANNATFARVPVATYTNSSQPFRLGERSFSRQYAHYATR LIQMRPFLENRAQQHWGS
GVGVKKLCELQPEEKCCVVGTLFKAMPLQPSILREVSEEHNLLPQPPRSKYIHPDDELVLEDELQRIKLKGTIDV
SKLVTGTVLAVFGSVRDDGKFLVEDYCFADLAPQKPAPPLDTRFVLLVSGLGGLGGGGESLLGTQLLVDVVTGQ
LGDEGEQCSAAHVSRVILAGNLLSHSTQSRDSINKAKYLTTKTQAASVEAVKMLDEILLQLSASVPVDVMPGEFD
PTNYTLPQQPLHPCMFPLATAYSTLQLVTNPYQATIDGVRFLGTSGQNVSDIFRYSSMEDHLEILEWTLRVRHIS
PTAPDTLGCYFFYKTDFFIFPECPHVYFCGNTPSFGSKIIRGPEDQTVLLVTVPDFSATQTACLVNLRSLACQPI
SFSGFGAEDDDLGGGLGLGP

WO 2004/030615

PCT/US2003/028547

2444/6881
FIGURE 2248A

TCCCTCGCTCACCCCATCCTCTCTCCCGCCCTTCTGATTCCCTCACCCGTCTCGATCCCTCTCCGCCCTTT
CCCAGAGACCCAGAGCCCTGACCCCCGCGCCCTCCCGGAGCCCCCGCGCGTGCCGCGCCATGGCGGCCGT
GCGCGGGGCGCCCTGCTCAGCTGCCTCCTGGCGTTGCTGGCCCTGTGCCCTGGAGGGCGCCCGCAGACGGTGCT
GACCGACGACGAGATCGAGGAGTTCTCGAGGGCTTCTGTGAGAGCTAGAACCTGAGCCCCGGGAGGACGACGT
GGAGGCCCCGCGCCTCCCGAGCCACCCCGCGGGTCCGAAAAGCCCAGGCGGGGGGCAAGCCAGGGAAGCGGCC
AGGGACGGCCGAGAAAGTGCTCCGAAAAGACCAAGACAAAGGGAAGAAAGGCAAGAAAGACAAAGGCCCAA
GGTGCCCAAGGAGTCCTTGGAGGGGTCCCCAGGCCGCCAAGAAGGGGAAGGAGAAGCCACCCAAGGCCACCAA
GAAGCCCAAGGAGAAGCCACCTAAGGCCACCAAGAAGCCCAAGGAGAAGCCACCCAAGGCCACCAAGAAGCCCAA
AGAGAAGCCACCCAAGGCCACCAAGAAGCCCCCGTCAGGGAAGAGGCCCCCATTTCTGGCTCCCTCAGAAACCTT
GGAGTGGCCACTGCCCCACCCCCAGCCCTGGCCCCGAGGAGCTACCCAGGAGGGAGGGGCGCCCCCTCTCAAA
TAACTGGCAGAATCCAGGAGAGGAGACCCATGTGGAGGCACGGGAGCACCAGCCTGAGCCGAGGAGGAGACCGA
GCAACCCACACTGGACTACAATGACCAGATCGAGAGGGAGGACTATGAGGACTTTGAGTACATTGCGCGCCAGAA
GCAACCCAGGCCACCCCCAAGCAGAAGGAGGAGGCCCGAGCGGGTCTGGCCAGAGCCCCCTGAGGAGAAGGCCCC
GGCCCCAGCCCCGAGGAGAGGATTGAGCCTCCTGTGAAGCCTCTGCTGCCCCCGCTGCCCCCTGACTATGGTGA
TGGTTACGTGATCCCCAACTACGATGACATGGACTATTACTTTGGGCCCTCTCCGCCCCAGAAGCCCGATGCTGA
GCGCCAGACAGACGAAGAGAAGGAGGAGCTGAAGAAACCCAAAAGGAGGACAGCAGCCCCAAGGAGGAGACCGA
CAAGTGGGCAGTGGAGAAGGGCAAGGACCACAAAGAGCCCCGAAAGGGCGAGGAGTTGGAGGAGGAGTGGACGCC
TACGGAGAAAGTCAAGTGTCCCCCATTTGGGATGGAGTCAACCCGATTGAGGACAACCAGATCCGAGCCTCCTC
CATGCTGCGCCACGGCCTGGGGGCACAGCGCGGGCCGGTCAACATGCAGACCCGGTGCCACTGAGGACGACTACTA
TGATGGTGCGTGGTGTGCCGAGGACGATGCCAGGACCCAGTGGATAGAGGTGGACACCAGGAGGACTACCCGGTT
CACAGGCGTCATACCCAGGGCAGAGACTCCAGCATCCATGACGATTTTGTGACCACCTTCTTCGTGGGCTTCAG
CAATGACAGCCAGACATGGGTGATGTACACCAACGGCTATGAGGAAATGACCTTTCATGGGAACGTGGACAAGGA
CACACCCGTGCTGAGTGAGCTCCAGAGCCGGTGGTGGCTCGTTTCATCCGCATCTACCCACTCACCTGGAATGG
CAGCCTGTGCAIGCGCTGGAGGTGCTGGGGTGTCTGTGGCCCCCTGTCTACAGCTACTACGCACAGAATGAGGT
GGTGGCCACCGATGACCTGGATTTCGGGCACCACAGCTACAAGGACATGCGCCAGCTCATGAAGGTGGTGAACGA
GGAGTGCCCCACCATCACCCGCACTTACAGCCTGGGCAAGAGCTCACGAGGCCTCAAGATCTATGCCATGGAGAT
CTCAGACAACCCCTGGGGAGCATGAAC TGGGGGAGCCCGAGTTCCGCTACACTGCTGGGATCCATGGCAACGAGGT
GCTGGGCGGAGAGCTGTTGCTGCTGCTCATGCAGTACCTGTGCCGAGAGTACCGCATGGGAACCCACGTGTGCG
CAGCCTGGTGCAGGACACACGCATCCACCTGGTGCCCTCACTGAACCCCTGATGGCTACGAGGTGGCAGCGCAGAT
GGGCTCAGAGTTTGGGAAC TGGGCGCTGGGACTGTGGACTGAGGAGGGCTTTGACATCTTTGAAGATTTCCCGGA
TCTCAACTCTGTGCTCTGGGGAGCTGAGGAGAGGAAATGGGTCCCTACCGGGTCCCCAACAAATAACTTGCCCAT
CCCTGAACGCTACCTTTTCGCCAGATGCCACGGTATCCACGAGGTCCGGGCCATCATTGCCTGGATGGAGAAGAA
CCCCTTCTGTGCTGGGAGCAAATCTGAACGGCGCGGAGCGGCTAGTATCCTACCCCTACGATATGGCCCCGACGCC
TACCCAGGAGCAGCTGCTGGCCGAGCCATGGCAGCAGCCCGGGGGGAGGATGAGGACGAGGTCTCCGAGGCCCA
GGAGACTCCAGACCACGCCATCTTCCGGTGGCTTGCCATCTCCTTCGCCTCCGCACACCTCACCTTGACCGAGCC
CTACCGCGGAGGCTGCCAAGCCAGGACTACACGGCGGCATGGGCATCGTCAACGGGGCCAAGTGGAAACCCCG
GACCGGACTATCAATGACTTCAGTTACCTGCATACCAACTGCCTGGAGCTCTCCTTCTACCTGGGCTGTGACAA
GTTCCCTCATGAGAGTGAGCTGCCCCGCGAGTGGGAGAACAACAAGGAGGCGCTGCTCACCTTCATGGAGCAGGT
GCACCGCGGCATTAAAGGGGGTGGTGACGGACGAGCAAGGCATCCCCATTGCCAACGCCACCATCTCTGTGAGTGG
CATTAAATCACGGCGTGAAGACAGCCAGTGGTGGTGGTATTACTGGCGAATCTTGAACCCGGGTGAGTACCGCGTGAC
AGCCACGCGGAGGGCTACACCCCGAGCGCCAAGACCTGCAATGTTGACTATGACATCGGGGCCACTCAGTGCAA
CTTCATCCTGGCTCGCTCCAAC TGGAAAGCGCATCCGGGAGATCATGGCCATGAACGGGAACCGGCCTATCCCACA
CATAGACCCATCGCGCCCTATGACCCCCAACAGCGACGCCTGCAGCAGCGACGCCTACAACACCGCCTGCGGCT
TCGGGCACAGATGCGGCTGCGGCGCCTCAACGCCACCACCACCTAGGCCCCACACTGTGCCTCCACGCTGCC
CCCTGCCCCCTGCCACCACCTGAGCACTACCATAGAGCCCTGGGGCCTCATACCGCCAACCACCGCTGGCTGGGA
GGAGTCGGAGACTGAGACCTACACAGAGGTGGTGACAGAGTTTGGGACCGAGGTGGAGCCCGAGTTTGGGACCAA
GGTGGAGCCCCGAGTTTGGAGACCCAGTTGGAGCCTGAGTTTGGAGACCCAGCTGGAACCCGAGTTTGGGAAGAGGA
GGAGGAGGAGAAAGAGGAGGAGATAGCCACTGGCCAGGCATTCCCTTCACAACAGTAGAGACCTACACAGTGAA

WO 2004/030615

PCT/US2003/028547

2445/6881
FIGURE 2248B

CTTTGGGGACTTCTGAGATCAGCGTCCTACCAAGACCCAGCCCAACTCAAGCTACAGCAGCAGCACTTCCCAAG
CCTGCTGACCACAGTCACATCACCATCAGCACATGGAAGGCCCTGGTATGGACACTGAAAGGAAGGGCTGGTC
CTGCCCCCTTTGAGGGGGTGCAAACATGACTGGGACCTAAGAGCCAGAGGCTGTGTAGAGGCTCCTGCTCCACCTG
CCAGTCTCGTAAGAGATGGGGTTGCTGCAGTGTTGGAGTAGGGGCAGAGGGAGGGAGCCAAGGTCACCTCCAATAA
AACAAAGCTCATGGC

WO 2004/030615

PCT/US2003/028547

2446/6881
FIGURE 2249

GTTTCCCTCTGCGTTTCGCTCCGCGCTGCTGGAGGCTGTCTGTCCTCCAAATGCTCCCCAAACGGCGGCGAGCGCGGGTC
GGGTCCCTTAGCGGCGATGCCGCTTCTTCCACGCCGCCCTCGACGCGCTTCCCGGGAGTCGCCATCTACCTGGTC
GAGCCTCGCATGGGTTCGACGCCGCCGGGCTTCTTCCACAGGCCTGGCGCGCTCCAAAGGCTTCCGCGTCTTTGAC
GCCTGCAGCTCCGAAGCGACACATGTTGTGATGGAAGAGACCTCAGCAGAGGAGGCCGTGAGCTGGCAGGAGCGC
AGGATGGCAGCTGCTCCCCCGGGTTGCACCCCCCAGCTCTGCTGGACATAAGCTGGTTAACAGAGAGCCTGGGA
GCTGGGCAGCCTGTACCTGTGGAGTGCCGGCACCGCCTGGAGGTGGCTGGGCCAAGGAAGGGGCCTCTGAGCCCA
GCATGGATGCCTGCCTATGCCTGCCAGCGCCCTACGCCCCCTCACACACCACAACACTGGCCTCTCCGAGGCTCTG
GAGATACTGGCCGAGGCAGCAGGCTTTGAAGGCAGTGAGGGCCGCTCCTCACCTTCTGCAGAGCAGCCTCGGTG
CTCAAGGCCCTTCCAGCCCTGTACAAACCTTGAGCCAGCTGCAGGGGCTTCCCCACTTTGGAGAACAACCTCTCT
AGGGTTGTCCAGGAGCTGCTGGAGCATGGAGTGTGTGAGGAGGTGGAGAGAGTTCGGCGCTCAGAGAGGTACCAG
ACCATGAAGCTCTTACCCAGATCTTCGGGGTCGGTGTGAAGACTGCTGACCGGTGGTACCAGGAAGGACTGCCA
ACCTTAGATGACCTCCGAGAGCAGCCCCAGAACTAACCACAGCAGAAAGCGGGGCTCCAGCACCACCAGGAC
CTGAGCACCAGCTCCTGCGGTCCGATGTAGATGCCCTGCAGCAGGTGGTGGAGGAAGCTGTGGGGCAGGCCCTG
CCTGGGGCCACCGTCACGCTGACCGGCGGCTTCCGACAGGGGGAAGTTGCAGGGCCATGACGTGGACTTCTCATC
ACCCACCCCAAGGAGGCTCAGGAGGCGGGGCTGCTGCCTAGAGTGATGTGCCGCTGCAGGACCAGGGCCTCATC
CTGTACCACCAGCACCAGCACAGCTGCTGTGAGTCCCCTACCCGCTGGCCCAACAGAGCCACATGGACGCTTTT
GAGAGAAGTTTCTGCATTTTCCGCTTACCACAACCTCCAGGGGCTGCTGTGGGGGGATCCACGAGGCCCTGCCCA
TCCTGGAAGGCCGTGAGAGTGGACTTGGTAGTTGCACCCGTCAGCCAGTTCCCTTTTCGCCCTGCTCGGTTGGACT
GGCTCCAAGCTTTTCCAGCGGGAGCTGCGCCGCTTACGCCGAAGGAGAAGGGCCTGTGGCTGAACAGCCATGGG
CTGTTTGACCCGGAGCAGAAGACATTTTCCAAGCGGCTTCAGAGGAAGACATCTTCAGACACCTGGGCCTTGAG
TACCTTCTCCAGAGCAGAGAAACGCCCTGAGCCTGCCTGTGTCCCCCACTTCCACTCAGGAAATTGGGCTGCCCC
CAACCTGGCCACTGAATGTCTCCAGGCAGATATGCTGCCCCCTGACCCCCACCTTACCCCTCCCCGCAAGGCC
TGGCTCTTCCGGAGGTCAATTGTGCCTGCAGGATCAGTTGAGCCCCCTGCTGGTGTGCTGCAGGGTGTGATGAGGT
GGGAGCCCTCAGTGCCAGCCTCATCACTGTGTGACCCCTGGGTCTGCTCTTAGCCTCCCCATGGCTCACGTTCTG
CCCTGGATGGGATGTGAGTGGGGCCACATCGTGGAGCTGTGGTGGGGCCTGCAGTCATGAATGGCAAGTGGTCC
CTGATGTGCAGTGCTCATTAGTTGCACTGCAGTTAACTGTGGCTCCTGCAGGGCACCCCTGCCAGAAATGCCAG
AAGAGAACCATGCATACCTGCACTGCATTTGAGAGCCATGAGCTGGAGGCTGTGGTTCTGTCAGCAAGGAGCCT
ACTGTCTGGTGTGCTGTAGGCATCTGGAGAGGGAGAGGGCCTGGGTAGGAGCTGGGAGGAAGATAATTTTCAACT
ATGGGGCTTCAGTACTGCAGCGCCCCGAGCCAGGCTCTGTGCTTCTGCCTTTAAGGCCTGTTCTCAGCACAATGT
CTCAAAAATAGGTCATATCCTGCCACTCCCGTCGCAGAGCCCTTTAATGGTTCCAAACCTAAGTCCACACATAG
CCCCTGGCTCTGGCATCTCTCCAGCCCCACTGGCCCCGAGCTGCTTGACTCACCGGCTTCTATTTGATGCACCC
AGGCCCCCTTGTGGCCAACTCCCTCCCTTCTCACTGAGGCAGAAGCACTGAGGTGGGCTGGACATGGGTGCCCT
CCACGTCCCTCATATCCCAGGCACACTCTGGCCTCAGGTTTTGCCCTGGCCATGTCATCTACCTGGAGTGGGCC
CTCCCCTTCTCAGGCCTTGAATCAAAAGCCACTTTGTAGGCGAGGATTTCCAGACCACTCATCACATTAAAA
AATATTTTGAAAACATGCAGT

WO 2004/030615

PCT/US2003/028547

2447/6881
FIGURE 2250

MLPKRRRARVGSPSGDAASSTPPSTRFPGVAIYLVEPRMGRSRAFLTGLARSKGFRVLDACSSEATHVVMEEETS
AEEAVSWQERRMAAAPPGCTPPALLDISWLTESLGAGQVPVVECRHRLEVAGPRKGPLSPAWM PAYACQRPTPLT
HHNTGLSEALEILAEAAGFEGSEGRLLTFCRAASVLKALPSPVTTLSQLQGLPHFGEHSSRVVQELLEHGVC EEV
ERVRRSERYQTMKLFTQIFGVGVKTADRWYREGLRTLDDLREQPQKLTQQQKAGLQHHQDLSTPVLRS DVDALQQ
VVEEAVGQALPGATVILTTGGFRRGKLQGHVDVFLITHPKEGQEAGLLPRVMCRLQDQGLILYHQHQHSCCESPTR
LAQQSHMDAFERSFCIFRLPQPPGAAVGGSTRPCPSWKAVRVDLVVAPVSQFPFALLGWTGSKLFQRELRRFSRK
EKGLWLNSHGLFDPEQKTFFQAASEEDIFRHLGLEYLELPPEQRNA

WO 2004/030615

PCT/US2003/028547

2448/6881

FIGURE 2251

GGCACGAGGGCGGAGACTGCGGGGCGGGCCATGGCGGCGAACCTGAGCCGGAACGGGGCCAGCGCTGCAAGAGGCC
TACGTGCGGGTGGTACCCGAGAAGTCCCCGACCGACTGGGCTCTCTTTACCTATGAAGGCAACAGCAATGACATC
CGCGTGGCTGGCACAGGGGAGGGTGGCCTGGAGGAGATGGTGGAGGAGCTCAACAGCGGGAAGGTGATGTACGCC
TTCTGCAGAGTGAAGGACCCCAACTCTGGACTGCCCAAATTTGTCCTCATCAACTGGACAGGCGAGGGCGTGAAC
GATGTGCGGAAGGGAGCCTGTGCCAGCCACGTGAGCACCATGGCCAGCTTCCTGAAGGGGGCCCATGTGACCATC
AACGCACGGGCGGAGGAGATGTGGAGCCTGAGTGCATCATGGAGAAGGTGGCCAAGGCTTCAGGTGCCAACTAC
AGCTTTCACAAGGAGAGTGGCCGCTTCCAGGACGTGGGACCCAGGCCCCAGTGGGCTCTGTGTACCAGAAGACC
AATGCCGTGTCTGAGATTAAAGGGTTGGTAAAGACAGCTTCTGGGCCAAAGCAGAGAAGGAGGAGGAGAACCGT
CGGCTGGAGGAAAAGCGGCGGGCGGAGGAGGCACAGCGGCAGCTGGAGCAGGAGCGCCGGGAGCGTGAGCTGCGT
GAGGCTGCACGCCGGGAGCAGCGCTATCAGGAGCAGGGTGGCGAGGCCAGCCCCAGAGCAGGACGTGGGAGCAG
CAGCAAGAAGTGGTTTCAAGGAACCGAAATGAGCAGGAGTCTGCCGTGCACCCGAGGGAGATTTTCAAGCAGAAG
GAGAGGGCCATGTCCACCACCTCCATCTCCAGTCCTCAGCCTGGCAAGCTGAGGAGCCCCCTTCCTGCAGAACAG
CTCACCAACCAGAGACCCACTTTGGCAGAGAGCCAGCTGCTGCCATCTCAAGGCCCAGGGCAGATCTCCCTGCT
GAGGAGCCGGCGCCAGCACTCCTCCATGTCTGGTGCAGGCAGAAGAGGAGGCTGTGTATGAGGAACCTCCAGAG
CAGGAGACCTTCTACGAGCAGCCCCCACTGGTGCAGCAGCAAGGTGCTGGCTCTGAGCACATTGACCACCACATT
CAGGGCCAGGGGCTCAGTGGGCAAGGGCTCTGTGCCCCGTGCCCTGTACGACTACCAGGCAGCCGACGACACAGAG
ATCTCCTTTGACCCCGAGAACCTCATCACGGGCATCGAGGTGATCGACGAAGGCTGGTGGCGTGCTATGGGCCG
GATGGCCATTTTGGCATGTTCCCTGCCAACTACGTGGAGCTCATTGAGTGAGGCTGAGGGCACATCTTGCCCTTC
CCCTCTCAGACATGGCTTCCTTATTGCTGGAAGAGGAGGCCTGGGAGTTGACATTACGACTCTTCCAGGAATAG
GACCCCAAGTGAGGATGAGGCCTCAGGGCTCCCTCCGGCTTGGCAGACTCAGCCTGTACCCCAAAATGCAGCAAT
GGCCTGGTGATTCCACACATCCTTCCCTGCATCCCCGACCCCTCCAGACAGCTTGGCTCTTGCCCCCTGACAGGA
TACTGAGCCAAGCCCTGCCTGTGGCCAAGCCCTGAGTGGCCACTGCCAAGCTGCGGGGAAGGGTCTTGAGCAGGG
GCATCTGGGAGGCTCTGGCTGCCTTCTGCATTTATTTGCCTTTTTTCTTTTCTCTTGCTTCTAAGGGGTGGTGG
CCACCACTGTTTAGAATGACCCTTGGGAACAGTGAACGTAGAGAATTGTTTTTAGCAGAGTTTGTGACCAAAGTC
AGAGTGGATCATGGTGGTTTGGCAGCAGGGAATTTGTCTTGTGAGCCTGCTCTGTGCTCCCCACTCCATTTCT
CTGTCCCTCTGCCTGGGCTATGGGAAGTGGGGATGCAGATGGCCAAGCTCCCACCCCTGGGTATTCAAAAAACGGCA
GACACAACATGTTCCCTCCACGCGGCTCACTCGATGCCTGCAGGCCCCAGTGTGTGCCTCAACTGATTCTGACTTC
AGGAAAAGTAACACAGAGTGGCCTTGGCCTGTTGTCTTCCCCTATTTTCTGTCCCAGCTCATCCGTGTCTCTGAA
GAACAAATATGCTTTTGGACCACGAAA

WO 2004/030615

PCT/US2003/028547

2449/6881

FIGURE 2252

MAANLSRNGPALQEAYVRVVTEKSP TDWALFTYEGNSN DIRVAGTGEGGLEEMVEELNSGKVMYAF CRVKDPNSG
LPKFVLINWTGEGVNDVRKGACASHVSTMASFLKGAVTINARAEEDVEPECIMEKVAKASGANYSFHKESGRFQ
DVGPQAPVGSVYQKTNAVSEIKRVGKDSFWAKAEKEEENRRLEEKRRAEAAQRQLEQERRERELREAAARREQRYQ
EQGGEAS PQSRTWEQQQEVVSRNRNEQESAVHPREIFKQKERAMSTTSISSPQPGKLRS PFLQQLTQPETHFGR
EPAAAI SRPRADLP AE EPAPSTPPCLVQAEEEEAVYEEPP EQETFYEQPPLVQQQGAGSEHIDHHIQQGLSGQGL
CARALYDYQAADDTEISFDPENLITGIEVIDEGWWRGYGPDGHFGMF PANYVELIE

WO 2004/030615

PCT/US2003/028547

2450/6881
FIGURE 2253

GGGGAGAGCGGGTGTGTTGAAGGCTCCGCGGACCGGCACTAGGAGCCGGGGGCGGGTCCGTGACCCCTCCGGCTGCT
CGGAGTGAACAGGCGGCCAGGAAAGAAGCGGGCCTGAACACCATGATCCCTTTGGAGAAGCCAGGCAGCGGGCGG
TCCTCCCCAGGCGCCACCTCAGGCTCGGGCCGGGCAGGCCGGGGTCTGAGCGGGCCGTGCCGGCCGCCGCCGCCG
CCCCAGGCCCCGCGGGCTGCTGACAGAGATACGCGCCGTGGTGCGCACCGAGCCCTTCCAGGACGGCTACAGCCTG
TGCCCGGGCCGGGAGCTGGGCAGGGGGAAATTTGCAGTGGTGAGAAAATGTATAAAGAAAGATTCTGGGAAAGAA
TTTGCTGCAAAGTTCATGAGAAAAAGAAGAAAAGGCCAAGATTGTCCGATGGAAATAATTCATGAGATTGCTGTA
CTTGAAGTACGACAAGACAATCCTTGGGTCATTAATTTACATGAAGTTTATGAGACTGCATCAGAAATGATCTTA
GTTCTGGAATATGCTGCTGGGGGTGAAATCTTTGACCAGTGTGTTGCAGACAGAGAAGAAGCCTTTAAAGAAAAA
GATGTTCAAAGACTTATGCGACAGATTTTAGAAGGTGTTCACTTTTTACACACTCGTGATGTAGTTTCATCTTGAT
TTGAAGCCTCAGAATATTCTGTTGACAAGTGAATCTCCATTGGGTGACATTAAGATTGTTGATTTTGGCCTTTCA
AGAATATTGAAGAACAGTGAAGAGCTCCGAGAAATTATGGGTACCCCTGAATATGTGGCTCCTGAAATTTCTTAGT
TATGATCCTATAAGCATGGCAACAGATATGTGGAGCATTGGAGTGTAAACATATGTCATGCTTACAGGAATATCA
CCTTTCTTAGGCAATGATAAACAAGAAACATTCTTAAACATCTCACAGATGAATTTAAGTTATTCTGAGGAAGAA
TTTGATGTTTTGTCTGAGTCGGCTGTTGATTTTCATCAGGACACTTTTAGTTAAGAAACCTGAAGATCGAGCCACT
GCTGAAGAATGTCTAAAGCACCCCTGGTTGACACAGAGCAGTATTCAAGAGCCTTCTTTCAGGATGGAAAAGGCA
CTAGAAGAAGCAAAATGCCCTCCAAGAAGGTCAATTCTGTGCCTGAAATTAATTCGGATACCGACAAATCAGAAACC
AAGGAATCCATTGTAACCGAAGAGTTAATTGTAGTTACTTCATATACTCTAGGACAATGCAGACAGTCTGAAAAA
GAGAAATGGAGCAAAAGGCCATTTCCAAACGATTTAAATTTGAGGAACCTTTGCTACAAGAAATTCAGGAGAA
TTTATCTACTGAGCAATATTTCCCTTTAGAACTTCAAGATTTCTACATTGAAAATGTTAATATTATTTATGGACC
TCTGGCCAAATGGTACATGTACTGGAAAGTGGAATAACCAGTATCACTTACACAAACAAAATAACTTTGTCAAATT
TGTGGAGTTAGGTGGAAGCCAGATTTTAAAAGTTGCCAACCAGGAGATTTAACAGGTACAGTTACCCGTTTCAAT
GTTATTTTAAAGAGGAGATGTTGGCACCTTTGAATTCTACATCCTGTTTCTCCAGAATGAGAATTTGTGTACA
AAGATATTTGTATTCATTTCTTTAAAAAATCCAAGTAAAAGTGCCAAAACACTACACTTCTGTAAATCTCTTGCA
TATTCATATGTGTATCTATATCTGCATAATGTTTGTTAATGTCTACTAAAATTGCTACTTTTTCACTTTGGATTT
GTTTTTGCCAAATTTTAGTCTAAACAGACATCTAAATTTTCGAGACTTAGAATAACATTCACTAAAGTTTGATA
ATGTCTTTTTTAAATATTTTCTTACTGCTTTATAGTGACTTGATTTGGTTTCTGTTGTGTTTTGCTAAATACT
AGTAACATATCAGTGAAAAACCTAATTTTTTTTCTTCAATGTCACTAGTAAGAGAGGTGGTAATTTTTTACC
TCTGAAATATTCTGGGTTTAGGTGTCAGCTCTTGAGCTGCTTCCCTCATCACACCACACTCACATGCATCTGTT
CTCTCTCACACTCTATACCCCTGCCACTTCCTGGCACCTCCCCCATGCTTGTCAATTTAATTTTGGCCACTTGTA
GGTATCAGTGTGATCTGATCAACACTCTGGTTACCTTGGTCAGTGAAAAGATGCTACTATATTGCTTTTGTCCCA
AAGTGAGTAAAATCCCCTAGAGCAGAGAGAGAGAGAGAGAGAGAGAGAGTGTCTTCATGCCAACCACAGCCTGTTTC
TGCTGAGTTTCTTATCAGCCCTCAAGCTATGCTAGGAAAAGTTATAAAATGCCAAAATATTTATAAACATTTACT
TTGTCCATAAAAAATTTACATTGGATACTCTGTAAGTAGGAGGTACTTTGTCCCCAAAAGATGTATAAGAATGTA
CTAATAGTTTTATTTGATTAGGATTGAACAGTTTCAGTTGTATCTATGCCCCACAGTGACCAGTAAAGTCCAATTA
AAATATGGAAATGTAAAAGTGTATGCCGAATACCTTAAAGTAACTAATTATCCTTACACACAAAAGGCTCAGTGC
ATTAAATATTTGCCTATC

WO 2004/030615

PCT/US2003/028547

2451/6881
FIGURE 2254

ATGCGGAGCGCGGGTACAGCTTTTCGCTGACTACATTCAGCCCCTCTGGTAACTTGTCCAGATTGAATATGCT
TTGGCTGCTGTAGCTGGAGGAGCCCCGTCCGTGGGAATTAAAGCTGCAAATGGTGIGGTATTAGCAACTGAGAAA
AAACAGAAATCCATTCTGTATGATGAGCGAAGTGTACACAAAGTAGAACCAATTACCAAGCATATAGGTTTGGTG
TACAGTGGCATGGGCCCCGATTACAGAGTGCTTGTGCACAGAGCTCGAAAAGTAGCTCAACAATACTATCTTGTG
TACCAAGAAGCCATTCTTACAGCTCAGCTGGTACAGAGAGTAGCTTCTGTGATGCAAGAATATACTCAGTCAGGT
GGTGTTCGTCCATTGGAGTTTCTTTACTTATTTGTGGTTGGAATGAGGGACGACCATATTTATTTTCAGTCAGAT
CCATCTGGAGCTTACTTTGCCTGGAAAGCTACAGCAATGGGAAAGAACTATGTGAATGGGAAGACTTTTCTTGAG
AAAAGATATAATGAAGATCTGGAAGCTGAAGATGCCATTACATACAGCCATCTTAACCTAAAGGAAAGCTTTGAA
GGGCAAATGACAGAGGATAACATAGAAGTTGGAATCTGCAATGAAGCTGGATTTAGGAGGCTTACTCCAAGTAA
GTTAAGGATTACTTGGCTGCCATAGCATTAACAATGAAGTGACTGAAAAATCCAGAAATTTAGATAATCTATCTAC
TTAAACATGTTTAAAGTATGTTTGTGTTTGCAGACTTTTGCATACTTATTTCTACATGGTTTAAATCGACTGTT
TTTAAATGACACTTATAAATCCTAATAAAGTGTAAACCC

WO 2004/030615

PCT/US2003/028547

2452/6881
FIGURE 2255

MAERGYSFSLTTFSPSGKLVQIEYALAAVAGGAPSVGIKAANGVVLATEKKQKSILYDERSVHKVEPITKHIGLV
YSGMGPDYRVLVHRARKLAQQYYLVYQEPIPTAQLVQRVASVMQEYTSQGGVRPFGVSLICGWNEGRPYLFQSD
PSGAYFAWKATAMGKNYVNGKTFLEKRYNEDLELEDAIHTAILTLKESFEGQMTEDNIEVGICNEAGFRRLTPTE
VKDYLAIAIA

WO 2004/030615

PCT/US2003/028547

2453/6881
FIGURE 2256

GCTCGGCGCCCTCTTCCCTGCAAACCATGTTTGCCAAAGGCAGAGGCTCGGCGGTGCCCTCGGATGGGCAGGCTT
GGGAAAAGTTAGCTTCATACGTCTACGAATATTTACTGCACGTAAGAGTACAGAAATCTGCAGAGACCTTCTTGT
CGGAGATTTCGATGGGAAAAAACATCACGTTGGGAGAACC GCCTGGGTTTTTGCACTCGTGGTGGTGTGTATTG
GGGACCTTTACTGTGCAGCTCCTCAAAGGAGAGACACTTGTGAACATTCAAGTGAAGCAAAAGCCTTTCATGATT
ATAGTGCAGCAGCTGCCCCGAGCCCCGTGCTTGGCAACATTCCCCCAACGATGGGATGCCGGGAGGCCCCATCC
CGCCAGGTTTCTTTTCAGGGTCCTCCGGGGTCACAGCCCTCGCCGCACGCACAGCCTCCACCTCACAATCCTAGCA
GCATGATGGGACCCACAGTCAGCCTCCGGGAGGAGTTCTTGGGACACAGCCATTGCTGCCCAATTCTATGGATC
CCACACGACAACAAGGCCACCCCAACATGGGAGGATCAATGCAGAGAAATGAACCCTCCCCGAGGCATGGGGCCCA
TGGGTCCCGGCCCCACAGAATTACGGCAGCGGCATGAGACCACCACCAACTCCCTCGGCCCCGCCATGCCCCGGGAT
TAACATGGGCCCCGGGAGCTGGCAGACCCTGGCCCAATCCTAACAGTGCTAACTCAATTCCATATTCTCTCTCATC
ACCTGGTACCTATGTGGGACCCCCGGTGGTGGCGGCCCTCCAGGAACACCCATTATGCCCAGTCCCGCAGATTCA
ACAAATTCCAGTGACAACATCTACACAATGACCTGGCGGCAGGTCCAACCTCCCGATGGGTCCCGGCTCGGACGG
TCCGATGGGCGGCATGGGTGGCATGGAGCCACACCACATGAATGGATCATTAGGGTCAGGCGACATAGACGGACT
TCCAAAAAATTCTCCTAACAACATAAGTGGCATTAGCAATCCTCCAGGCACCCCTCGAGATGACGGCGAGCTAGG
AGGGAGCTTCCTCCACTCCTTTT CAGAATGACAATTATTCTCCAAGCATGACGATGAGTGTGTGATCCCCCTTCT
CCGAGACGCTGAGAGAGCCGGCATTGCAGGCGGGAAGACGCCAGAAATTATGCAAGAAGTGAGGTGTTATTATCC
AGGAGCTGGTGGGGAGGGCATCTCCCTGCTCCCCTAAACCCCTCCCACCCCATCCACGCCCCCTACCTTTCCCA
ATTTTAGTTTCATGCAATAAAAAGGCCAAACTTTTTATTCCATAAAAC

WO 2004/030615

PCT/US2003/028547

2454/6881
FIGURE 2257

MFAKGRGSAVPSDGQAWEKLASVVEYLLHVRVQKSAETFLSEIRWEKNI TLGEPPGFLHSWWCVFGDLYCAAPQ
RRDTCEHSSEAKAFHDYSAAAAPSPVLGNIPPNDGMPGGPIPPGFFQPFMSPRYVGGPGPP IRMGNQPPGGVLGT
QPLLPNSMDPTRQQGHPNMGGSMQRMNPPRGMGPMGPGPQNYGSGMRPPPNLSLGP PCPLTWARELADPGP ILTV
LTQFHIPPHHLVPMWDPRWWRPSRNTHYAQSRRFNKFQ

WO 2004/030615

PCT/US2003/028547

2455/6881
FIGURE 2258

GGCGGGTTCGCGCCCCGAAGGCTGAGAGCTGGCGCTGCTCGTGCCCTGTGTGCCAGACGGCGGAGCTCCGCGGCC
GGACCCCGCGCCCCGCTTTTGCTGCCGACTGGAGTTTGGGGGAAGAACTCTCCTGCGCCCCAGAGGATTTCTTC
CTCGGCGAAGGGACAGCGAAAGATGAGGGTGGCAGGAAGAGAAGGGCGCTTTCTGTCTGCCGGGGTCGCAGCGCG
AGAGGGCAGTGCCATGTTCTCTCCATCCTAGTGCGCTGTGCCTGTGGCTGCACCTGGCGCTGGGCGTGCAGCGG
CGCGCCCTGCGAGGCGGTGCGCATCCCTATGTGCCGGCACATGCCCTGGAACATCACGCGGATGCCCAACCACCT
GCACCACAGCACGCAGGAGAACGCCATCCTGGCCATCGAGCAGTACGAGGAGCTGGTGGACGTGAAGTGCAGCGC
CGTGCTGCGCTTCTTCTCTGTGCCATGTACGCGCCATTTGCACCCTGGAGTTCCTGCACGACCCTATCAAGCC
GTGCAAGTCGGTGTGCCAACGCGCGCGCAGCAGTGCAGAGCCCTCATGAAGATGTACAACCACAGCTGGCCCGA
AAGCCTGGCCTGCGACGAGCTGCCTGTCTATGACCGTGGCGTGTGCATCTCGCCTGAAGCCATCGTCACGGACCT
CCCGGAGGATGTTAAGTGGATAGACATCACACCAGACATGATGGTACAGGAAAGGCCTCTTGATGTTGACTGTAA
ACGCCTAAGCCCCGATCGGTGCAAGTGTAAGGTTGAAGCCAACCTTTGGCAACGTATCTCAGCAAAAACCTACAG
CTATGTTATTCATGCCAAAATAAAAGCTGTGCAGAGGAGTGGCTGCAATGAGGTCACAACGGTGGTGGATGTAA
AGAGATCTTCAAGTCTCATCACCCATCCCTCGAACTCAAGTCCCGCTCATTACAAATTCTTCTTGCCAGTGTCC
ACACATCTGCCCATCAAGATGTTCTCATCATGTGTTACGAGTGGCGCTCAAGGATGATGCTTCTTGAAAATTG
CTTAGTTGAAAAATGGAGAGATCAGCTTAGTAAAAGATCCATACAGTGGGAAGAGAGGCTGCAGGAACAGCGGAG
AACAGTTCAGGACAAGAAGAAAACAGCCGGGCGCACCAGTCGTAGTAATCCCCCAAACCAAGGGAAGCCCTCC
TGCTCCCAAACCAGCCAGTCCCAAGAAGAACATTAAGAACTAGGAGTGGCCAGAAGAGAACAACCCGAAAAGAGT
GTGAGCTAAGTATTTCCAAAGCGGAGACTTCCGACTTCCTTACAGGATGAGGCTGGGCATTGCTGGGACAGCC
TATGTAAGGCCATGTGCCCTTGCCCTAACAACTCACTGCAGTGTCTTTCATAGACACATCTTGAGCATTTTTC
TTAAGGCTATGCTTCAGTTTTTCTTTGTAAGCCATCACAAGCCATAGTGGTAGGTTTGCCCTTTGGTACAGAAGG
TGAGTTAAAGCTGGTGGAAAAGGCTTATTGCATTGCATTGAGAGTAACCTGTGTGCATACCTTAGAAGAGTAGGG
AAAATAATGCTTGTTACAATTCGACCTAATATGTGCATTGTAAAATAAATGCCATATTTCAAACAAAACACGTAA
TTTTTTTACAGTATGTTTTATTACCTTTTGATATCTGTTGTTGCAATGTTAGTGATGTTTTTAAATGTGATCGAA
AATATAATGCTTCTAAGAAGGAACAGTAGTGGAAATGAATGTCTAAAAGATCTTTATGTGTTTTATGGTCTGCAGAA
GGATTTTTGTGATGAAAGGGGATTTTTTGAAAAATCTAGAGAAGTAGCATATGGAAAACATAATGTGTCTTTTT
TACAATGACTTCAGCTCTGTTTTTAGCTAGAACTCTAAAAACAAAAATAATAAAGAAAAATAAATAAAAAAG
GAGAGGCAGACAATGTCTGGATTCTGTGTTTTTGGTTACCTGATTTTCATGATCATGATGCTTCTGTGCAACACCC
TCTTAAGCAGCACCAGAAACAGTGAGTTTGTCTGTACCATTAGGAGTTAGGTACTAATTAGTTGGCTAATGCTCA
AGTATTTTATACCCACAAGAGAGGTATGTCATCTACTTCTCCAGGACATCCACCCTGAGAATAATTTGACA
AGCTTAAAAATGGCCTTCATGTGAGTGCCAAATTTGTTTTCTTCATTTAAATATTTTCTTTGCCTAAATACATG
TGAGAGGAGTTAAATATAAATGTACAGAGAGGAAAGTTGAGGTTCCACCCTTGAAATGAGAATTACTTGACAGTT
GGGATACTTTAATCAGAAAAAAGAACTTATCTGCAGCATTTTATCAACAAATTTTCAATTTGTGGACAATTGG
AGGCATTTATTTTAAAAACAATTTTATTGGCCTTTTGCTAACACAGTAAGCATGTATTCTCTATAAGGCATTCA
ATAAATGCACAACGCCCAAAGGAAATAAAATCCTATCTAATCCTACTCTCCACTACACAGAGGTAATCACTATTA
GTATTTTGGCATATTATCTCCAGGTGTTTCTTATGCACTTATAAAATGATTTGAACAAATAAACTAGGAACCT
GCTATACATGTGTTTCATAACCTGCCTCCTTTTGCTTGCCCTTTTATTGAGATAAGTTTTCTGTCAAGAAAGCAG
AAACCATCTCATTTCTAACAGCTGTGTTATATTCATAGTATGCATTACTCAACAACTGTTGTGCTATTGGATA
CTTAGGTGGTTTCTTCACTGACAATACTGAATAAACATCTCA

WO 2004/030615

PCT/US2003/028547

2456/6881
FIGURE 2259A

GCGTGTGCTGGGGCGAGCGGGAGCGGGCGAGGATGGGCACAGGATAGAGGCAGAGCCACCCACGCCGCCGCGGCC
CCACGCTGGGGCGACAGAGCCTCCAGTTCCCTTCAATGGTGGCGGGTCGCCGGAGCTCTGATCGCCGGGAACCTT
TGCCGCTGCTGTCTGCGACCCCAAGCAGGTATAGACACGTGTGGCCGTTTACGCTGTAGGATCCTCATTCCAC
TGGCTTTGAACATTTTGGGGACTTACAATGCCGCCACCCGCGGACATCGTCAAGGTGGCCATAGAATGGCCGGGC
GCCTACCCCAAACCTCATGGAAATTGATCAGAAAAACCACTGTCTGCAATAATAAAGGAAGTCTGTGATGGGTGG
TCTCTTGCCAACCATGAATATTTTGCACCTCCAGCATGCCGATAGTTCAAACCTTCTATATCACAGAAAAGAACCGC
AATGAGATAAAAAATGGCACTATCCTTCGATTAAACCATCTCCAGCTCAGAACGCCAGCAGCTCCATGAACGA
ATCCAGTCCTCGAGTATGGATGCCAAGCTGGAAGCCCTGAAGGACTTGGCCAGCCTCTCCCGGGATGTACAGTTT
GCCCAGGAGTTTATAAACCTGGACGGTATCTCTCTCCTCACGCAGATGGTGGAGAGCGGCACTGAGCGATACCAG
AAATTGCAGAAGATCATGAAGCCTTGCTTTGGAGACATGCTGTCTTCACCCTGACGGCCTTCGTCGAGCTGATG
GACCATGGCATAGTGTCTGGGATACATTTTCGGTGGCGTTTCATTAAGAAGATAGCAAGTTTTGTGAACAAGTCA
GCCATAGACATCTCGATCCTGCAGCGGTCTTGGCCATTTTGGAGTCGATGGTGTCTCAATAGCCATGATCTCTAC
CAGAAAGTGGCGCAGGAGATCACCATCGGCCAGCTCATTCCACACCTGCAAGGGTCAGATCAAGAAATCCAAACC
TATACTATTGCAGTGATTAAATGCGCTTTTCTGAAAGGCTCCTGATGAGAGGAGGCAGGAGATGGCGAATATTTTG
GCTCAGAAGCAACTGCGTTCCATCATTTTAAACACATGTCATCCGAGCCAGCGGGCCATCAACAATGAGATGGCG
CACCAGCTGTATGTTCTACAAGTGCTCACCTTTAACCTCCTGGAAGACAGGATGATGACCAAAATGGACCCCCAG
GACCAGGCTCAGAGGGACATCATATTTGAACTTCGAAGAATTGCTTTTTGATGCTGAGTCTGAACCTAACACAGC
AGTGGCAGCATGGAGAAAACGCAAGTCCATGTACACGCGAGATTATAAGAAGCTTGGGTTTCATTAATCATGTCAAC
CCTGCCATGGACTTCACGCAGACTCCACCTGGGATGTTGGCTCTGGACAACATGCTGTACTTTGCCAAGCACCAC
CAAGATGCCTACATCCGGATTGTGCTTGAGAACAGTAGTCGAGAAGACAAGCATGAATGTCCCTTTGGCCGCAGT
AGTATAGAGCTGACCAAGATGCTATGTGAGATCTTGAAAGTGGGCGAGTTGCCTAGTGAGACCTGCAACGACTTC
CACCCGATGTTCTTACCCACGACAGATCCTTTGAGGAGTTTTTCTGCATCTGTATCCAGCTCCTGAACAAGACA
TGGAAGGAAATGAGGGCAACTTCTGAAGACTTCAACAAGGTAATGCAGGTGGTGAAGGAGCAGGTTATGAGAGCA
CTTACAACCAAGCCTAGCTCCCTGGACAGTTCAAGAGCAAACCTGCAGAACCTGAGCTACACTGAGATCCTGAAA
ATCCGCCAGTCCGAGAGGATGAACCAGGAAGATTTCCAGTCCCGCCCGATTTTGGAACTAAAGGAGAAGATTTCAG
CCAGAAATCTTAGAGCTGATCAAACAGCAACGCCTGAACCGCCTTGTGGAAGGGACCTGCTTTAGGAACTCAAT
GCCCCGCGGAGGCAAGACAAGTTTTGGTATTGTGGCTTTCGCCAAATCACAAAGTCTGCATTACGGAGACTTA
GAAGAGAGTCTCAGGGAGAAGTGCCCCACGATTCTTGCAGGACAACTGCCGGTGGCAGATATCAAAGCCGTG
GTGACGGGAAAGGACTGCCCTCATATGAAAGAGAAAGGTGCCCTTAAACAAAACAAGGAGGTGCTTGAACCTCGCT
TTCTCCATCTTGTATGACTCAAACCTGCCAAGTGAACCTCATCGCTCCTGACAAGCATGAGTACTGTATCTGGACG
GATGGACTGAATGCGCTACTCGGGAAGGACATGATGAGCGACCTGACGCGGAATGACCTGGACACCTGCTCAGC
ATGGAATCAAGCTCCGCCTCCTGGACCTGGAAAACATCCAGATCCTGACGCACCTCCGCCGATTCCCAAGGAG
CCCAGCAACTATGACTTCGTCTATGACTGTAACCTGAAGTGGCCGGGGCCAGACATGCCCTTCCAAAACCTGGAAC
ACCTAGCTAACAGGAGAGAGGAATGAAAACACACCCACGCCTTGGAAACCGTCTTTGGTAAAGGGAAGCTGTGGG
TCCACATTCCCTTCAGCATCACCTCTAGCCCTGGCACTTTTCCAGCCCTAGCTGGCATCTTGCTCACCGCCCTGA
TTCTGTTCCCTCGGCTCCACTGCTTCAGGTCACTTCCCATGGCTGCAGTCCACTGGTGGGACAAGAGCAAAGCCCA
CTGCCAGTAAGAAGGCCAAAGGGCCCTTCCATCTTAGCCCTCTGCAGGCATGCCCTTCCCTTGGGCAGGAA
AGCCAGCAGCCCCAGACTGCCCAAAAACCTTGCCACACAGACCAAGGGCAGTGCCCCAAGGCCCTGTCTGGAGGA
AATGGCCTAGCTATTTGATGAGAAGACCAAACCCACATCCTCCTTTCCCTCTCTCTAGAATCATCTCGCACCA
CCAGTTACACTTGAATTAAGATCTGCGCTCAAATCTCCTCCACCTCTCTCCCTGCTTTTGGCTTGTCTGTCTCC
TCTTTGGTCCCAAGAGCAGCAGCCGACGCTCCTCGTGATCCTCCCTAGCATAAATTTCCCAACAGTCCACAGG
TCCCATGCCACTTTGCGTCTGCACGTGTGATCGTGACAAATCTTCCCTCCTCACCAGCTAGTCTGGGGTTTCTC
TCCCTGCCCCAGGCCAGAAGTGCCTTCTTCAATTTCCACCCACGCTCCAGCCTCTTAGCTGAAAGCACAAATGGT
GAAATCAGTAGTCTCGCTCCATCTCTAATAGACTAAACCTAAATGCCTCTAGGACGGACTGTTGCTATCCAAGCG
TTTGGTGTACCTTCTCCTGGGAGGTCTGCTGCAACTCAAGTTCCACAGGATGGTCAAGCTGTGACACATCCAA
GTTTACATCATTTGTAATTATTACTGGTATTTACAATTTGCAAGAGTTTTGGGTTAGTTTTTTTTTTTTTTTGGT
TTGTTTTTGGACAAAAGAGTCTAACATTTTTTGGCAAACAGATATATATTTAATGAAAAGAAGAGATACATAAAT
GTGTGAATTTCCAGTTTTTTTTTAAATTATTTTAAATCCCAAACATCTCCTGAAAAATAACATTCCCTTAAACATGC

WO 2004/030615

PCT/US2003/028547

2457/6881
FIGURE 2259B

TGTGGAATAAAATGGATTGTGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2458/6881
FIGURE 2260

CATTTAAAGGTGTGCGGCGGGTCTCTGTTCACATGGCTCAACTGGAAACCTGTTTCATGAACAAGCTTACTCAGG
AACCATCTGGTGGTATTCCAGCACATTGTTCTTCAGGGGGACGACTCTAAGTCGCTTTGTGGTGGCAGCAGCTTA
GAATCAGTATTTGTGGTTGGGAAAGATGGACTTACGGGAGCTTGGTAATGCAGGTGGTGAAGGAGCAGGTTATGA
GAGCACTTACAACCAAGCCTAGCTCCCTGGACCAGTTCAAGAGCAAACCTGCAGAACCTGAGCTACACTGAGATCC
TGAAAATCCGCCAGTCCGAGAGGATGAACCAGGAAGATTTCAGTCCCGCCCGATTTTGGAACATAAAGGAGAAGA
TTCAGCCAGAAATCTTAGAGCTGATCAAACAGCAACGCCTGAACCGCCTTGTGGAAGGGACCTGCTTTAGGAAAC
TCAATGCCCCGCGGAGGCAAGACAAGTTTTGGTATTGTGCGCTTTCGCCAAATCACAAAGTCCTGCATTACGGAG
ACTTAGAAGAGAGTCCCTCAGGGAGAAGTGCCCCACGATTCCCTTGCAAGGACAACTGCCGGTGGCAGATATCAAAG
CCGTGGTGACGGGAAAGGACTGCCCTCATATGAAAGAGAAAGGTGCCCTTAAACAAAACAAGGAGGTGCTTGAAC
TCGCTTTCTCCATCTTGTATGACTCAAACCTGCCAACTGAACCTCATCGCTCCTGACAAGCATGAGTACTGTATCT
GGACGGATGGACTGAATGCGCTACTCGGGAAGGACATGATGAGCGACCTGACGCGGAATGACCTGGACACCCCTGC
TCAGCATGGAATCAAGCTCCGCCTCCTGGACCTGGAAAACATCCAGATCCCTGACGCACCTCCGCCGATTCCCA
AGGAGCCCAGCAACTATGACTTCGTCTATGACTGTAACTGAAGTGCGCCGGGCCCAGACATGCCCCCTTCCAAAAC
GGAACACCTAGCTAACAGGAGAGAGGAATGAAAACACACCCACGCCTTGGAACCGTCCTTTGGTAAAGGGAAGCT
GTGGGTCCACATTCCCTTCAGCATCACCTCTAGCCCTGGCAACTTTCAGCCCCCTAGCTGGCATCTTGCTCACCGC
CCTGATTCTGTTCCCTCGGCTCCACTGCTTCAGGTCACTTCCCATGGCTGCAGTCCACTGGTGGGACAAGAGCAAA
GCCCACCTGCCAGTAAGAAGGCCAAAGGGCCCCCTTCCATCCTAGCCCTCTGCAGGCATGCCCTTCCTTCCCTTGGGC
AGGAAAGCCAGCAGCCCCAGACTGCCCAAAAACCTTGCCCCACCAGACCAAGGGCAGTGCCCCCAAGGCCCTGTCTG
GAGGAAATGGCCTAGCTATTTGATGAGAAGACCAAAACCCACATCCTCCTTTCCCTCTCTCTAGAAATCATCTCG
CACCACCAGTTACACTTGAATTAAGATCTGCGCTCAAACTCCTCCACCTCTCTCCCTGCTTTTGCCTTGCTCT
GTTCTCTTTGGTCCCAAGAGCAGCAGCCGCGAGCCTCCTCGTGATCCTCCCTAGCATAAATTTCCCAAACAGTCC
ACAGGTCCCATGCCCACTTTGCGTCTGCACTGTGATCGTGACAAATCTTCCCTCCTCACCAGCTAGTCTGGGGTT
TCCTCTCCCTGCCCCAGGCCAGAACTGCCTTCTTCAATTTCCACCCACGCTCCAGCCTCTTAGCTGAAAGCACAA
ATGGTGAAATCAGTAGTCTCGCTCCATCTCTAATAGACTAAACCTAAATGCCTCTAGGACGGACTGTTGCTATCC
AAGCGTTTGGTGTTACCTTCTCCTGGGAGGTCTGCTGCAACTCAAGTTCCACAGGATGGTCAAGCTGTCAGACA
TCCAAGTTTACATCATTGTAATTATTACTGGTATTTACAATTTGCAAGAGTTTGGGTTAGTTTTTTTTTTTTTT
TTGCTTTGTTTTTGGACAAAAGAGTCTAACATTTTTTGGCAAACAGATATATATTTAATGAAAAGAAGAGATACA
TAAATGTGTGAATTTCCAGTTTTTTTTTAAATTATTTAATCCCAAACATCTTCTGAAAATAACATTCCCTTAAA
CATGCTGTGGAATAAAATGGATTGTGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2459/6881
FIGURE 2261

MQVVKEQVMRALTTKPSSLDQFKSKLQNLSTEILKIRQSERMNQEDFQSRPILELKEKIQPEILELIKQQRNLNR
LVEGTCFRKLNARRRQDKFWYCRSPNHKVLHYGDLEESPQGEVPHDSLQDKLPVADIKAVVTGKDCPHMKEKGA
LKQNKVLELAFSILYDSNCQLNFIAPDKHEYCIWTDGLNALLGKDMMSDLTRNDLDTLLSMEIKLRLLDLENIQ
IPDAPPPIPKEPSNYDFVYDCN

WO 2004/030615

PCT/US2003/028547

2460/6881
FIGURE 2262

GCACCCGGCAGCGGTCTCAGGCCAAGCCCCCTGCCAGCATGGCCAGCGAGTTCAAGAAGAAGCTCTTCTGGAGGG
CAGTGGTGGCCGAGTTCCCTGGCCACGACCCTCTTTGTCTTCATCAGCATCGGTTCTGCCCTGGGCTTCAAATACC
CGGTGGGGAACAACCAGACGGCGGTCCAGGACAACGTGAAGGTGTCGCTGGCCTTCGGGCTGAGCATCGCCACGC
TGGCGCAGAGTGTGGGCCACATCAGCGGCGCCACCTCAACCCGGCTGTCACACTGGGGCTGCTGCTCAGCTGCC
AGATCAGCATCTTCCGTGCCCTCATGTACATCATCGCCAGTGCCTGGGGGCCATCGTCGCCACCGCCATCCTCT
CAGGCATCACCTCCTCCCTGACTGGGAACCTCGCTTGGCCGCAATGACCTGGCTGATGGTGTGAACCTCGGGCCAGG
GCCTGGGCATCGAGATCATCGGGACCCCTCCAGCTGGTGCTATGCGTGCTGGCTACTACCGACCGGAGGCGCCGTG
ACCTTGGTGGCTCAGCCCCCCTTGCCATCGGCCTCTCTGTAGCCCTTGGACACCTCCTGGCTATTGACTACACTG
GCTGTGGGATTAACCTGCTCGGTCCCTTTGGCTCCGCGGTGATCACACAACTTCAGCAACCACTGGATTTTCT
GGGTGGGGCCATTATCGGGGGAGCCCTGGCTGTACTCATCTACGACTTCATCCTGGCCCCACGCAGCAGTGACC
TCACAGACCGCGTGAAGGTGTGGACCAGCGGCCAGGTGGAGGAGTATGACCTGGATGCCGACGACATCAACTCCA
GGGTGGAGATGAAGCCCAAATAGAAAGGGGTCTGGCCCGGGCATCCACGTAGGGGGCAGGGGCAGGGGCGGGCGGA
GGGAGGGGAGGGGTGAAATCCATACTGTAGACACTCTGACAAGCTGGCCAAAGTCACTTCCCCAAGATCTGCCAG
ACCTGCATGGTCAAGCCTCTTATGGGGGTGTTTCTATCTCTTTCTTTCTTTCTGTTTCCTGGCCTCAGAGCTT
CCTGGGGACCAAGATTTACCAATTCACCCACTCCCTTGAAGTTGTGGAGGAGGTGAAAGAAAGGGACCCACCTGC
TAGTCGCCCCCTCAGAGCATGATGGGAGGTGTGCCAGAAAGTCCCCCCTCGCCCCAAAGTTGCTCACCAGCTCACC
TGCGCAAGTGCCTGGGATTCTACCGTAATTGCTTTGTGCCTTTGGGCAGGCCCTCCTTCTTTTCTAACATGCAC
CTTGCTCCCAATGGTGCTTGGAGGGGGAAGAGATCCAGGAGGTGCAGTGGAGGGGGCAAGCTTTGCTCCTTCAG
TTCTGCTTGCTCCCAAGCCCCCTGACCCGCTCGGACTTACTGCCTGACCTTGGAATCGTCCCTATATCAGGGCCTG
AGTGACCTCCTTCTGCAAAGTGGCAGGGACCGGCAGAGCTCTACAGGCCTGCAGCCCCTAAGTGCAAACACAGCA
TGGGTCCAGAAGACGTGGTCTAGACCAGGGCTGCTCTTTCCACTTGCCCTGTGTTCTTTCCCCAGGGGCATGACT
GTCGCCACACGCCTCTGCATATATGTCTCTTTGGAGTTGGAATTTTATTATATGTTAAGAAAATAAAGGAAAATG
ACTTGTAAGGTC

WO 2004/030615

PCT/US2003/028547

2461/6881
FIGURE 2263

MASEFKKKLFWRAVVAEFLATTLFVFISIGSALGFKYPVGNNQTAVQDNVKVSLAFGLSIATLAQSVGHISGAHL
NPAVTLGLLLSCQISIFRALMYIIAQCVGAIVATAILSGITSSLTGNSLGRNDLADGVNSGQGLGIEIIGTLQLV
LCVLATTDRIIRDLGGSAPLAIGLSVALGHLLAIDYTGCGINPARSFGSAVITHNFSNHWIFWVGPFIGGALAVL
IYDFILAPRSSDLTDRVKVWTSGQVEEYDLDDADDINSRVEMKPK

WO 2004/030615

PCT/US2003/028547

2462/6881
FIGURE 2264A

TCAGTCCCCGTGCACAGACCTGCACAAATGGCTGAGCCTCATCATTCCTGACAGCGAGGAGATCTTGGATGTGCC
AGGCCTAGTGAAAGACCAACAATCTCACTGCAGGGCCCCGCCAGCCCCAGGGAAGGGGAGGAGTTCTTGCCGCGCC
GACGCCGCCGTGCCACGGCAACGCGGCCATACTGCGCCGGACAGACCCAGTTGCCTGGTGCTGCGGCCCGGCGT
GGGCTCGTGGGCAGAGCCAGAGCCAGAGCCATGGACAGCCTCTTCGTGGAGGAGGTGGCCGCCCTCCTTGGTGAG
GGAGTTCTCAGCAGAAAGGGCTTAAAGAAGACATGTGTGACCATGGACCAGGAACGCCACGCCTTGACCTCAG
CATAACAACAGAAATGATCTTCGAAAGGTTTTGCATCTTGAATTTCTCTATAAGGAGAACAAGGCAAAGGAAAA
TCCTCTAAAAACAAGCCTTGAACATCATCACCAGATACTTTCTGGATCACTTTGGAAATACGGCTAACAAATTTAC
TCAAGATACCCCCAATCCCTGCACTCTCAGTTCCAAAGAAAAATAACAAAGTGCCATCAAGATGCTCAGAGACTAC
ACTGGTAAATATATATGACCTTTTCAATGAAGATGCAGGATGGAGAATCATTTGTGAGAAACAAGCAAAGCCAG
ACATGACAATCTTGATGGAGATGTACTTGGTAATTTTGTATCATCTAAAAGGCCCGCACAAAAGTAAGCCCAT
GCAGACGGTCCCGGGTGAAACTCCTGTGTTGACTTCTGCATGGGAGAAGATAGACAAGCTTCACTCGGAGCCTTC
CTTGGATGTGAAGAGGATGGGAGAGAATTCCAGGCCAAAGTCTGGTCTGATTGTGCGAGGCATGATGTCTGGGCC
CATCGCCAGCTCCCCACAGGTGAGGAAATCAGGGACAGAGAAGTTAAGCAGCTTGCCACAGGTGACACAGTTGGT
AGGTGGTGATGCAGACTGGAGCGACGGCTTCACCTGCTGCATGAACCTGCTCTCTGATTCTTTTACAGACACTA
TCTGAGACGGTCTCACCCTCAAGCAGCTCCACCCAACCCCAAGAAGAGAGCCGGAAGGTCCCTGAGCTCTTTGT
CTGCACCCAACAGGACATTCTGGCTTCGAGCAACAGCTCCCCCTCCAGGACCTCCCTGGGTGAGCTTAGTGAAT
GACCGTAGAAAGGCAGAAAACCACTGCCAGCAGCCCTCCCCATCTGCCAGCAAACGGCTGCCCCCATGGGACAG
GGCCAGGCCGAGGGATCCCTCCGAGGACACCCAGCAGTGAGCGGCAGCACAGACACGGACAGGATGCCCTTGAA
GCTCTACTTGCTGGTGGTAATTCAGGATGACCCAGGAGAGGCTGGAAAGAGCGTTCAAACGGCAGGGCAGCCA
GCCCCACCTGTGAGGTATTACAGTAAAGATAAACTGCAAAGCCTGTCCCTGGATATCACCTTAGATGCATGGA
TGCCCTGGGGGAAAGTTTGCTGGTATCCCTGGGGTCTCATTCCTAAAGACTGAAGCAGCTCTCTTGTCTTCCC
CAGCGTGTTTTCTACGGCTGCATTGGGTTTTGCTGCATTTGCAGACATTTTGGATAATGTACACTTATGGAA
AAATCAGTTGCTGCCGTCTGACAAGGTGGATGGTGAGCTGGGTGCCCTGCGGCTCGAGGATGTGGAGGATGAGTT
GATAAGGGAAGAGGTCATCCTGTCGCCAGTCCCATCAGTGCTCAAGTTGCAGACAGCATCAAAACCAATTGACCT
CTCAGTAGCAAAGGCACTTCAGATGTGGCTGGTGACAGAGCTGGGGAATAAGACCCCTCTGCTTTGGAGATGT
TAAATTTGAACATGGATTTAAGGAGCACTTGCTTCCCACTAGCCTTTGCCAATGTGTCCCAGGAGTCAGATCCTG
TGCTAAGCCCCGTGATGCCTACAGAGATGAGCTCCTCAAGAAGCCTCTGCACCACAGGGGTGGTCTTGCGGAGT
CCTGGCAGCTGTCCAAGGCTGTGTCTACAGAACTCCTGTTTGAAGGAGATAGCAAAGCCGACTGTGCTCAGGG
ACTGCAGCCTTCAGATGCCACCGGACCCGCTGCCTCGTCTTGCCCTCGCAGACATTGTGTGGCGGGCAGGGGG
CCGAGAGAGAGCCGTTGTTGCACTGGCTTCGAGAACACAGCAGTTCACTCCAACAGGGGAAATACAAAGCAGATGG
AGTCTTAGAAACACTTACGCTTCACAGTTTGACCTGCTATGAGGACCTGGTGACTTTTCTTCAACAAAGCATTCA
TCAGAACTTTCCCAAAGACCTGAAGGCCCTGGGCACAGCCCTGGGAAATGATCAGGCCCTGGCAGCACCAGATGT
CCCTTGGGTAGGCAATGGGGCCTACCCTAGGAACAAAAGGAGGCAGTTTGAAGTGGGCCCTATGGCTGCATCCT
GCTCACCCCTTCTGCCATCCTGTCCAGGTCTACAGAGCTGGGCCTCTGCTGTGATTTCGGGGGAGGACAGTGGGG
TGAGGACATCATGGACAGATGTAAACCTAGCCGAGTGCTGCCGACCACTGCCCTGGCCACTTCATTGTCAGA
GGCCCCAAGAAGAGTCGAGAAACAGACCTTTGAGGGAGCTCTCACAAAGCCCCAAGGATGCTCAGGGTCTTGGGGT
CAGGACAGCTCTGAACCAGACCTGGGCAGCACTGAGCATGGGCTGCTCTGGTGCTCAGTGAGCACAGACCTGG
CCAGGTCAATTGAGGCCCTGAGAAGGGTCCAGTGTGACCCCCAGGGCCGTGTGTGCCCCAGGGTTGTGTGTACCC
CCCTGGGTGAGGGGCCCTCAATGGACCTCACAGGGGCAAAGAAGACCCCTGAGCACAGTTGCTTGTATCAGTCTCT
CTCAGTACCCAGGAATTTGTCAATCTGCTCCTGACTGGGAAAGCTGTGTCCAACGTTTTCAACGATGTGGTTGA
GCTGGATTCTGGGGATGGGAACATCACACTTCTCAGAGGCATTGCTGCACGCAGTGATATTGGCTTCTTATCTCT
CTTTGAGCATTACAACATGTGCCAGGTTGGCTGCTTCTGAAGACCCCGAGGTTCCCCATCTGGGTGGTTTGCAG
TGAGAGCCACTTCAGCATCCTCTTTAGCCTGCAGCCGGGGCTCCTGCGTGACTGGAGGACTGAGAGGCTCTTTGA
CTTGTAATACTACGATGGCCTGGCCAACCAGCAGGAGCAGATCCGGCTGACCATTGACACCACCCAAACCATCTC
TGAGGACACAGACAACGACCTTGTCCCACCCCTCGAGCTCTGCATCAGAACCAAGTCTGTGTTCCATGTCTGCGA
GAACCTTGTGTGACACCAGCTGCCTGCCTGTTCCACTTCCCCCATCAATCCCCCATCATGGTGGGTCCACCTTGGC
AGTTGTTCTAGAAAAGCTGAGTGGGCTCTATCAGGCACCTTTTTCCCCATGAAAAACACTGGGTCCATCAACGT

WO 2004/030615

PCT/US2003/028547

2463/6881
FIGURE 2264B

TGAAAAGCAGTTAAGGCAGTATCAGCAATGGGCACTCACTGCCGAGGAGAAGTCTGACTTCACCAAGCCAAGCCA
GTTTGTCTCCAAATACGGCACCAGTGTCTCTTATTTGAGCAGTGAAGATGAACGCTCTGATATGGATAAATTCCA
TCAAAGTGGCTCAACCCCAAAACCCAATAGACTCCTCTGGATCTGCTTGACACACAGAAGCCCAGTAAATAGTCT
GAAGCACTTGGATAGCATAGAAGCACTTAATTCTTCACATCCAATGGATTTCAAAAAGAAGATGAGAACATGCA
GAAGTGC GGTGGCCTGCTGATGAAGAAGGGGACCCAGCAGCCTCTTCCCAAAGTGGCCCTGGCTGCCTGCAGCC
TTCCCTGGTGTCTTTGATTACCTGGGTCTTGGCCTCTGGCTCCCCATGTCCATCTGTCAAATCCTACCCATC
CCACAAGGCCAGCTCCAAGGCCCTCCTCTAAGAAGCCCTCCTGGATTACCCAGCCGACAGTTCAAGTCCTCCCC
TCTGAGTGCTCACAGGACTCAATCACCTCCTCTTTCACAAGCCTAG

WO 2004/030615

PCT/US2003/028547

2464/6881
FIGURE 2265

GTCAC TCGTATAAAAACCTATGCTTTGAAGGTTCTCGTGTGTCTCGGCCTGCAGGTCTCGCTCAGAGCTGTGTCC
CTGAACATCCACCCTGCTGGGGTGGCTTGACGCACTTCTGTGCAAATCTGTTGCTCGCAACCCTACCTACCTCT
CTCCCGAACCGGAGAAAACTTCGGCGGGGTCTTCCGGGTTTTGTGTGCAATCTGCGGCGGCGACCCGGCGCCG
CGTCACGCGGTGGTGAATGTGCGGCAGTACGCGCGCCGCGTCTGTTTACGCGGCGATTTCATCATGCTCCGAGCCG
GCGGCGCGCGCCGCTTCCGTGCGCCACCCTCTCTGGACAGCCCAGGGCCGAGGCTCATGCCCTCTCCGCGTCCAG
TGCTGCTTAGAGGTGCTCGCGCCGCTCTGCTGCTGCTGCTGCCGCCCGGCTCTTAGCCCGACCCCTCGTCCCTCC
TCCGCCGGTCCCTCAGCGCGGCCTCTGCGCCCCGATCTCCTTGCCCGCCGCGCTCCCGGAGCAGCATGGACG
GCGCGGGGGCTGAGGAGGTGCTGGCACCTCTGAGGCTAGCAGTGCGCCAGCAGGGAGATCTTGTCGCAAACTCA
AAGAAGATAAAGCACCCCCAAGTAGACGTAGACAAAGCAGTGGCTGAGCTCAAAGCCCGCAAGAGGGTTCTGGAAG
CAAAGGAGCTGGCGTTACAGCCCAAGATGATATTGTAGACCGAGCAAAAATGGAAGATACCCCTGAAGAGGAGGT
TTTTCTATGATCAAGCTTTTGCTATTTATGGAGGTGTTAGTGGTCTGTATGACTTTGGGCCAGTTGGCTGTGCTT
TGAAGAACAATATTATTCAGACCTGGAGGCAGCACTTTATCCAAGAGGAACAGATCCTGGAGATCGATTGCACCA
TGCTCACCCCTGAGCCAGTTTTAAAGACCTCTGGCCATGTAGACAAATTTGCTGACTTCATGGTGAAAGACGTAA
AAAATGGAGAATGTTTTCGTGCTGACCATCTATTAAGGCTCATTTACAGAAATTGATGTCTGATAAGAAGTGT
CTGTGCAAAAGAAATCAGAAATGGAAAGTGTGGGCCAGCTTGATAACTATGGACAGCAAGAACTTGGCGATC
TTTTTGTAAGTATAATGTAAATCTCCATTACTGGAAATGATCTATCCCTCCAGTGTCTTTAACTTAATGT
TCAAGACTTTCAATTGGGCCTGGAGGAAACATGCCTGGGTACTTGAGACCAGAACTGCACAGGGGATTTCTTGA
ATTTCAAACGACTTTTGGAGTTCAACCAAGGAAAGTTGCCTTTTGCTGCTGCCAGATTGGAATTTCTTTAGAA
ATGAGATCTCCCTCGATCTGGACTGATCAGAGTCAGAGAATTCACAATGGCAGAAATTGAGCACTTTGTAGATC
CCAGTGAGAAAGACCACCCCAAGTTCCAGAATGTGGCAGACCTTCACCTTTATTTGTATTACAGCAAAAGCCCAGG
TCAGCGGACAGTCCGCTCGGAAAAATGCGCCTGGGAGATGCTGTTGAACAGGGTGTGATTAAATAACACAGTATTAG
GCTATTTCAATTGGCCGCATCTACCTCTACCTCACGAAGGTTGGAATATCTCCAGATAAACTCCGCTTCCGGCAGC
ACATGGAGAATGAGATGGCCATTATGCCTGTGACTGTTGGGATGCAGAATCCAAAACATCCTACGGTTGGATTG
AGATTGTTGGATGTGCTGATCGTTCCTGTTATGACCTCTCCTGTCTATGCACGAGCCACCAAGTCCCCTTTGTAG
CTGAGAAACCTCTGAAAGAACCACCAACAGTCAATGTTGTTTCAAGTTTGAACCCAGTAAGGGAGCAATTGGTAAGG
CATATAAGAAGGATGCAAACTGGTGATGGAGTATCTTGCCATTTGTGATGAGTGCTACATTACAGAAATGGAGA
TGCTGCTGAATGAGAAAGGGGAATTCACAATTGAACTGAAGGGAAAACATTTTCAAGTTTAAACAAAGACATGATCA
ATGTGAAGAGATTCCAGAAAACACTATATGTGAAGAAGTTGTTCCGAATGTAATTGAACCTTCTTCCGCTGG
GTAGGATCATGTATACGGTATTTGAACATACATTCCATGTACGAGAAGGAGATGAACAGAGAACATTCTTCAGTT
TCCCTGCTGTAGTTGCTCCATTCAAATGTTCCGTCTCCACTGAGCCAAAACCAGGAGTTTCATGCCATTTGTCA
AGGAATTATCGGAAGCCCTGACCAGGCATGGAGTATCTCACAAGTAGACGATTCTCTGGGTCAATCGGAAGGC
GCTATGCCAGGACTGATGAGATTGGCGTGGCTTTTGGTGTACCATTTGACACAGTGAACAAGACCCCCC
ACACTGCAACTCTGAGGGACCGTGACTCAATGCGGCAGATAAGAGCAGAGATCTCTGAGCTGCCAGCATAGTCC
AAGACCTAGCCAATGGCAACATCACATGGGCTGATGTGGAGGCCAGGTATCCTCTGTTTGAAGGGCAAGAGACTG
GTAAAAAGAGACAATCGAGGAATGAGGACAATTTTGACAACCTTTTGACCACTTTGCGCTAATAAAAAAAAAAAAA
CTACTCTTATGTCCACTTTACAAAAGAAAACAGCATTGTGATTACTCCAGGGACCGTATTTTATCTTCAGTGGC
TGCTGATTTTACCCCCACAATTAAAGTTGAAGGAATCCTGA

WO 2004/030615

PCT/US2003/028547

2465/6881
FIGURE 2266

MDGAGAEVLA PLRLAVRQQGDLVRKLKEDKAPQVDVDKAVELKARKRVLEAKELALQPKDDIVDRAKMEDTLK
RRFFYDQAF AIYGGVSGLYDFGPVGCALKNNIIQTWRQHFIQEEQILEIDCTMLTPEPVLKTS GHVDKFADFMVK
DVKNGE CFRADHLLKAHLQKLMSDKKCSVEKKSEMESVLAQLDNYGQQLADLFVNYNVKSPITGNDLSPPVSFN
LMFKTF IGPGGNMPGYLRPETAQGIFLNFKRLLEFNQGKLPFAAAQIGNSFRNEISPRSGLIRVREFTMAEIEHF
VDPSEKDHPKFQNVADLHLYLSAKAQVSGQSARKMRLGDAVEQGVINNTVLGYFIGRIYLYLTKVGISPDKLRF
RQH MENEMAHYACDCWDAESKTSYGWIEIVGCADRSCYDLSCHARATKVPLVAEKPLKEPKTVNVVQFEP SKGAI
GKAYKKDAKL VMEYLAICDECYIITEMEMLLNEKGEFTIETEGKTFQLTKDMINVKRFQKTLYVEEVV PNVIEPSF
GLGRIMYTVFEHTFHVREGDEQRTFFSFP AVVAPFKCSVLPLSQNQEFMPFVKELSEALTRHGVSHKVDDSSGSI
GRRYARTDEIGVAFGVTIDFDTVNKTPHTATLRDRDSMRQIRAEISELPSIVQDLANGNITWADVEARYPLFEGQ
ETGKKETIEE

WO 2004/030615

PCT/US2003/028547

2466/6881
FIGURE 2267

ATGACAGATGCCGCTGTGTCCTTCGCCAAGGACTTCCTGGCAGGTGGAGTGGCCGAAGCCATCTCCAAGACAGCG
GTAGCGCCCATCGAGCAGGTCAAGCTGCTGCTGCAGGCTTTTAACTTCGCCTTCAAAGATAAATACAAGCAGATC
TTCCTGGGTGGGAATCTGGCATCAGGAGGTGCCGCTGGGGCCACATACTTGTGTTTTGTGTACCCTCTTGATTTT
GCCCGTACCTGTCTAGCAGCTAATGTGGGTAAAGCTGAAGCTGAAAGGAATTCCGAGGCCTCTGTGACTGCCTG
GTTAAGATCTACAAATCTGATGGGATTAAGGGCCTGTACCAAGGCTTTAACGTGTCTATGCAGGGTATTATCCGA
GCTGCCTACTTCGGTATCTATGACACCGCAAAGGGAATGCTTCCGGATCCCAAGGACACTCACATCGTCATCAGC
TGGATGACCACACAGACTGTCACTGCCTTTTCTGGGTTGACTTCCTATTCATTTGACATCTCAGGGCGCAAAGTA
ACTGACATCATGTACACAGGCACACTTGACTGCTGGAGGAAGATTGCTGGTGATGAAGGAGGCAAAGCTTTTTTC
AAGGGTTCATGGTCCAGTGTCTCAGAGGCATGGGTGGTGCTTTTGTGCTTGCTTGTTTGATGAAATCAAGAAG
TACAGGTAA

WO 2004/030615

PCT/US2003/028547

2467/6881
FIGURE 2268

MTDAAVSFAKDFLAGGVAEAISKTAVAPIEQVKLLLQAFNFAFKDKYKQIFLGGNLASGGAAGATYLCFVYPLDF
ARTCLAANVGKAEAREFRGLCDCLVKIYKSDGIKGLYQGFNVSMQGIIRAAYFGIYDTAKGMLPDPKDTHIVIS
WMTTQTVTAFSGLTSYSFDISGRKVTDIMYTGTLDCWRKIAGDEGGKAFFKGSWSSVLRGMGGAFLVLFDEIKK
YR

WO 2004/030615

PCT/US2003/028547

2468/6881
FIGURE 2269

TCGGCGGGACGGCTCCCGGCTGCAGTCTGCCCCGCCGCCCGCGCGGGGGCCGAGTCGCGAAGCGCGCCTGCGAC
CCGGCGTCCGGGCGCGCTGGAGAGGACGCGAGGAGCCATGAGGCGCCAGCCTGCGAAGGTGGCGGCGCTGCTGCT
CGGGCTGCTCTTGGAGTGCACAGAAGCCAAAAAGCATTGCTGGTATTTTGAAGGACTCTATCCAACCTATTATAT
ATGCCGCTCCTACGAGGACTGCTGTGGCTCCAGGTGCTGTGTGCGGGCCCTCTCCATACAGAGGCTGTGGTACTT
CTGGTTCTTTCTGATGATGGGCGTGCTTTTCTGCTGCGGAGCCGGCTTCTTCATCCGGAGGCGCATGTACCCCC
GCCGCTGATCGAGGAGCCAGCCTTCAATGTGTCTTACACCAGGCAGCCCCCAAATCCCGGCCAGGAGCCCAGCA
GCCGGGGCCGCCCTATTACACCGACCCAGGAGGACCGGGGATGAACCCTGTGCGGAATTCCATGGCAATGGCTTT
CCAGGTCCCACCCAACCTACCCCAGGGGAGTGTGGCCTGCCCGCCCCCTCCAGCCTACTGCAACACGCCCTCCGCC
CCCGTACGAACAGGTAGTGAAGGCCAAGTAGTGGGGTGCCACGTGCAAGAGGAGAGACAGGAGAGGGCCTTTCC
CTGGCCTTTCTGTCTTCGTTGATGTTCACTTCCAGGAACGGTCTCGTGGGCTGCTAAGGGCAGTTCTCTGATAT
CCTCACAGCAAGCACAGCTCTCTTTCAGGCTTTCCATGGAGTACAATATATGAACCTCACACTTTGTCTCCTCTGT
TGCTTCTGTTTCTGACGCAGTCTGTGCTCTCACATGGTAGTGTGGTGACAGTCCCCGAGGGCTGACGTCTTACG
GTGGCGTGACCAGATCTACAGGAGAGAGACTGAGAGGAAGAAGGCAGTGCTGGAGGTGCAGGTGGCATGTAGAGG
GGCCAGGCCGAGCATCCCAGGCAAGCATCCTTCTGCCCGGGTATTAATAGGAAGCCCCATGCCGGGCGGCTCAGC
CGATGAAGCAGCAGCCGACTGAGCTGAGCCCAGCAGGTCTCTGCTCCAGCCTGTCTCTCGTCAGCCTTCTCTCT
TCCAGAAGCTGTTGGAGAGACATTCAGGAGAGAGCAAGCCCCCTTGTCTATGTTTCTGTCTCTGTTTCATATCCTAAA
GATAGACTTCTCCTGCACCGCCAGGGAAGGGTAGCACGTGCAGCTCTCACCGCAGGATGGGGCCTAGAATCAGGC
TTGCCTTGGAGGCCTGACAGTGATCTGACATCCACTAAGCAAATTTATTTAAATTCATGGGAAATCACTTCTCTGC
CCCAAACCTGAGACATTGCATTTTGTGAGCTCTTGGTCTGATTTGGAGAAAGGACTGTTACCCATTTTTTGGTGT
GTTTATGGAAGTGATGTAGAGCGTCTGCCCTTTGAAATCAGACTGGGTGTGTGTCTTCCCTGGACATCACTGC
CTCTCCAGGGCATTCTCAGGCCCCGGGGTCTCCTTCCCTCAGGCAGCTCCAGTGGTGGGTCTGAAGGGTGCTTT
CAAAACGGGGCACATCTGGCTGGGAAGTCACATGGACTCTTCCAGGGAGAGAGACCAGCTGAGGCGTCTCTCTCT
GAGGTTGIGTTGGGTCTAAGCGGGTGTGTGCTGGGCTCCAAGGAGGAGGAGCTTGCTGGGAAAAGACAGGAGAAG
TACTGACTCAACTGCACTGACCATGTTGTCATAATTAGAATAAAGAAGAAGTGGTCGGAATGCACATTCCTGGA
TAGGAATCACAGCTCACCCCAGGATCTCACAGGTAGTCTCCTGAGTAGTTGACGGCTAGCGGGGAGCTAGTTCCG
CCGCATAGTTATAGTGTGATGTGTGAACGCTGACCTGTCTGTGTGCTAAGAGCTATGCAGCTTAGCTGAGGCG
CCTAGATTACTAGATGTGCTGTATCACGGGGAATGAGGTGGGGTGCTTATTTTTTAATGAACATAATCAGAGCCT
CTTGAGAAATTGTTACTCATTGAACCTGGAGCATCAAGACATCTCATGGAAGTGGATACGGAGTGATTTGGTGTC
ATGCTTTTCACTCTGAGGACATTTAATCGGAGAACCTCCTGGGGAATTTTGTGGGAGACACTTGGGAACAAAACA
GACACCCTGGGAATGCAGTTGCAAGCACAGATGCTGCCACCAGTGTCTCTGACCACCCTGGTGTGACTGCTGACT
GCCAGCGTGGTACCTCCCATGCTGCAGGCCTCCATCTAAATGAGACAACAAAGCACAATGTTCACTGTTTACAAC
CAAGACAACCTGCGTGGGTCCAAACACTCCTCTCCTCCAGGTCAATTTGTTTTGCATTTTTAATGTCTTTATTTTT
TGTAATGAAAAAGCACACTAAGCTGCCCCCTGGAATCGGGTGACGTGAATAGGCACCCAAAAGTCCGTGACTAAA
TTTCGTTTGTCTTTTGTAGCAAATTATGTTAAGAGACAGTGATGGCTAGGGCTCAACAATTTTGTATTCCCAT
GTTTGTGTGAGACAGAGTTTGTTTTCCCTGAACTTGTTAGAAATTGTGCTACTGTGAACGCTGATCCTGCATAT
GGAAGTCCCACCTCGGTGACATTTCTGGCCATTCTTGTTTCCATTGTGTGGATGGTGGGTGTGCCCCACTTCTCT
GGAGTGAGACAGCTCCTGGTGTGTAGAATTCGCGGAGCGTCCGTGGTTCAGAGTAAACTTGAAGCAGATCTGTGC
ATGCTTTTCTCTGCAACAATTGGCTCGTTCTCTTTTTTGTCTCTTTTGATAGGATCCTGTTTCTATGTGTG
CAAAATAAAAAATAAATTGGGCA

WO 2004/030615

PCT/US2003/028547

2469/6881
FIGURE 2270

MRRQPAKVAALLLGLLLECTEAKKHCWYFEGLYPTYIICRSYEDCCGSRCCVRALSIQRLWYFWFLMMGVLFCC
GAGFFIRRRMYPPPLIEEPAFNVSYTRQPPNPGPGAQQPGPPYYTDPGGPGMNPVGNSMAMAFQVPPNSPQGSVA
CPPPPAYCNTPPPPYEQVVKAK

WO 2004/030615

PCT/US2003/028547

2470/6881
FIGURE 2271

GCCGCTCCTGGTGCTGCTTGTGTGCTCGTTTGGTGCGGACCTGGTACCTCTTTTGTGAAGTGGCAGCTGAGGAGA
CCGGCGCTCGCCATGGCCGACGAAAAGCCCAACCAAGGAGTCAAGTCGGAGACAACGATCATACTAATTTGAAG
GTGGCGGGGCAGGATGGTTCTGTGGTGCAAGTTTAAGATTAAGAGGCATACACCACTTAGTAACTAATGAAAGCC
TATTGTAAGCAACAGGGATTGTCAATGAGGCAGATCAGATTCCGATTGACGGGCAACCAATCAAGGAAACAGAC
ACACCTGCACAGTTGGAAATGGAGAATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTTGA

AAAGGGAACCTGCTTCTTTACTCCAGAACTCTGTTTCCTTAAAGACCAAGATTACATTCTCAATTAGTCTTTCATT
TCCCCCTTCCCCATTCCCTTTATTGTACATAACTGGTATATGTGCACAAGCATATTGCATTTTTTTTT

WO 2004/030615

PCT/US2003/028547

2471/6881
FIGURE 2272

MADEKPNQGVKSENNDHTNLKVAGQDGSVVQFKIKRHTPLSKLMKAYCKQQGLSMRQIRFRFDGQPIKETDTPAQ
LEMENEDTIDVFQQQTGGVY

WO 2004/030615

PCT/US2003/028547

2472/6881
FIGURE 2273

GGAGGAAAATTCTTCCAGCGATGGTCTCCCACTCAGAGCTGAGGAAGCTTTTCTACTCAGCAGATGCTGTGTGTT
TTGATGTTGACAGCACGGTCATCAGAGAAGAAGGAATCGATGAGCTAGCCAAAATCTGTGGCGTTGAGGACGCGG
TGTCAGAAATGACACGGCGAGCCATGGGCGGGGCAGTGCCTTTCAAAGCTGCTCTCACAGAGCGCTTAGCCCTCA
TCCAGCCCTCCAGGGAGCAGGTGCAGAGACTCATAGCAGAGCAACCCCCACACCTGACCCCCGGCATAAGGGGAGC
TGGTAAGTCGCCTACAGGAGCGAAATGTTTCAGGTTTTTCCTAATATCTGGTGGCTTTAGGAGTATTGTAGAGCATG
TTGCTTCAAAGCTCAATATCCCAGCAACCAATGTATTTGCCAATAGGCTGAAATTCTACTTTAACGGTGAATATG
CAGGTTTTGATGAGACGCAGCCAACAGCTGAATCTGGTGGAAAAGGAAAAGTGATTAACTTTTAAAGGAAAAAT
TTCATTTTAAGAAAATAATCATGATTGGAGATGGTGCCACAGATATGGAAGCCTGTCCTCCTGCTGATGCTTTCA
TTGGATTTGGAGGAAATGTGATCAGGCAACAAGTCAAGGATAACGCCAAATGGTATATCACTGATTTTGTAGAGC
TGCTGGGAGAACTGGAAGAATAACATCCATTGTCGTACAGCTCCAAACAACCTCAGATGAATTTTACAAGTTAT
ACAGATTGATACTGTTTGCTTACAGTTGCCTATTACAACCTTGCTATAGAAAGTTGGTACAAATGATCTGTACTTT
AAACTACAGTTAGGAATCCTAGAGATTGCTTTTTTTTTTTTTTTAACTGTAGTTCCAGTATTATATGATGACTA
TTGATTTCTTGAGAGAGTTTTTTTTTTTTTTTGGAGACAGAATCTTGCTCTGTTGCCAGGCTGGAGTGCAGTGGCG
CGGTCTCGGCTCACTGCAAGCTCTGCCTCCCAGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGA
CTACAGGCACCCGCCACCACATCCGGCTAATTTTTTGTATTTTAGTAGAGACGGGGTTTGACCGTGTAGCCAG
GATGGTCTTGATCTCCTGACCTTGTGATCCGCCTGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCTTGGGCCA
CCGCGCCCAGCCAATGTCCTAGAGAGTTTTGTGATCTGAATTCTTTATGTATATTTGTAGCTATATTTCATACAA
AGTGCTTTAAGTGTGGAGAGTCAATTAAACACCTTTACTCTTAGAAATACGGATTCCGGCAGCCTTCAGTGAATAT
TGGTTTCTCTTTGGTATGTCAATAAAAGTTTATCCGTATGTCAGAACGGATTGTGG

WO 2004/030615

PCT/US2003/028547

2473/6881
FIGURE 2274

CGAGAAGACCCGGATAGTTCTCCCGGCCACGCCGCGCCGGCTCTGGGCACTCAGCATCGTTTTCTTTCTCCG
CTGGAGCAGCTATGGCGGCGGTGAAGACCCTGAACCCCAAGGCCGAGGTGGCCCGAGCGCAGGCGGCGCTGGCGG
TCAACATCAGCGCAGCGCGGGGTCTGCAGGACGTGCTAAGGACCAACCTGGGGCCCAAGGGCACCATGAAGATGC
TCGTTTCTGGCGCTGGAGACATCAAACCTTACTAAAGACGGCAATGTGCTGCTTCACGAAATGCAAATTC AACACC
CAACAGCTTCCTTAATAGCAAAGGTAGCAACAGCCCAGGATGATATAACTGGTGATGGTACGACTTCTAATGTCC
TAATCATTGGAGAGCTGCTGAAACAGGCGGATCTCTACATTTCTGAAGGCCTTCATCCTAGAATAATCACTGAAG
GATTTGAAGCTGCAAAGGAAAAGGCCCTTCAGTTTTTGGGAAGAAGTCAAAGTAAGCAGAGAGATGGACAGGGAAA
CACTTATAGATGTGGCCAGAACATCTCTTCGTACTAAAGTTTCATGCTGAACTTGCAGATGTCTTAACAGAGGCTG
TAGTGGACTCCATTTTGGCCATTAAAAAGCAAGATGAACCTATTGATCTCTTCATGATTGAGATCATGGAGATGA
AACATAAACTGAAACTGATACAAGCTTAATCAGAGGGCTTGTTTTGGACCACGGAGCACGGCATCCTGATATGA
AGAAAAGGGTGGAGGATGCATACATCCTCACTTGTAACGTGTCATTAGAGTATGAGAAAACAGAAGTGAATTCTG
GCTTTTTTTACAAGAGTGCAGAAGAGAGAGAAAACTCGTGAAAGCTGAAAGAAAATTCATTGAAGATAGGGTTA
AAAAAATAATAGAACTGAAAAGGAAAGTCTGTGGCGATT CAGATAAAGGATTTGTTGTTATTAATCAAAAGGGAA
TTGACCCCTTTTCCTTAGATGCTCTTTCAAAAAGAAGGCATAGTCGCTCTGCGCAGAGCTAAAAGGAGAAATATGG
AGAGGCTGACTCTTGCTTGTGGTGGGGTAGCCCTGAATTCTTTTGACGACCTAAGTCCTGACTGCTTGGGACATG
CAGGACTTGATATGAGTATACATTGGGAGAAGAGAAGTTTACCTTTATTGAGAAATGTAACAACCCCTCGTTCTG
TCACATTATTGATCAAAGGACCAATAAGCACACACTCACTCAGATCAAAGATGCAGTGAGGGACGGCTTGAGGG
CTGTCAAAAATGCTATTGATGATGGCTGTGTGGTTCCAGGTGCTGGTGCCGTGGAAGTGGCAATGGCAGAAGCCC
TGATTTAAACATAAGCCCAGTGTAAGGGGCAGGGCACAGCTTGGAGTCCAAGCATTTGCTGATGCATTGCTCATT
TTCCCAAGGTTCTTGCTCAGAACTCTGGTTTTGACCTTCAGGAAACATTAGTTAAAATTCAAGCAGAACATT CAG
AATCAGGTCAGCTTGTGGGTGTGGACCTGAACACAGGTGAGCCAATGGTGGCAGCAGAAGTAGGCGTATGGGATA
ACTATTGTGTAAAGAAACAGCTTCTTCACTCCTGCACTGTGATTGCCACCAACATTCTCTTGGTGATGAGATCA
TGCGAGCTGGAATGTCTTCTCTGAAAGGTTGAATTGAAGCTTCCTCTGTATCTGAATCTTGAAGACTGCAAAGTG
ATCCTGAGGATTACAGCTGTGGAATTTTGTCCAAGCTTCAAATAATTTTGAAAGAAATTTTCCCATATGAAAAA
AGGAGAGAACACTGGCATCTGTTGAAATTTGGAAGTTCTGAAATTATAGTATTTTAAAAAATTGCACTGAAGTGT
ATACACATAAAGCAGGTCTTTTATCCAGTGAACAGGATGTTTTGCTTTAGCAGCAGTGACATAAAAATTCCATGTT
AGATAAGCATATGTTACTTACCTTGTTATTAAATATTTCTTGAAAAGCAGGCCACGAAGG

WO 2004/030615

PCT/US2003/028547

2474/6881
FIGURE 2275

MAAVKTLNPKAEVARAQAALAVNISAAAGLQDVLRTNLGPKGTMKMLVSGAGDIKLTGDGNVLLHEMQIQHPTAS
LIAKVATAQDDITGDGTTSNVLIIGELLKQADLYISEGLHPRIITEGFEEAAKEKALQFLEEVKVSREMDRETLID
VARTSLRTKVHAELADVLTEAVVDSILAIKKQDEPIDLFMIEIMEMKHKSETDTSIRGLVLDHGARHPDMKKRV
EDAYILTCNVSLEYEKTEVNSGFFYKSAEEREKLVKAERKFIEDRVKKIIELKRKVCSDKGFVVINQKGIDPF
SLDALKEGIVALRRARRRNMERLTLACGGVALNSFDDLSPDCLGHAGLVYEYTLGEEKFTFIEKCNNPRSVTLL
IKGPNKHTLTQIKDAVRDGLRAVKNAIDDGCVVPGAGAVEVAMAEALIKHKPSVKGRAQLGVQAFADALLIIPKV
LAQNSGFDLQETLVKIQAEHSESGQLVGVDLNTGEPMVAAEVGVWDNYCVKKQLLHSTVIATNILLVDEIMRAG
MSSLKG

WO 2004/030615

PCT/US2003/028547

2475/6881
FIGURE 2276

CAGACACACTGTGACGGCTGCCTGAAGCTAGTGAGTCGCGGCGCCGCGCACTGGTGGTTGGGTCACTGCCGCGCG
CCGATCGGTCGTTACCGCGAGGCGCTGGTGGCCTTCAGGCTGGACGGCGCGGGTCAGCCCTGGTTCGCCGGCTTC
TGGGTCTTTGAACAGCCGCGATGTCGATCTTCACCCCCACCAACCAGATCCGCCTAACCAATGTGGCCGTGGTAC
GGATGAAGCGTGCCGGAAGCGCTTCGAAATCGCCTGCTACAAAAACAAGGTCGTCGGCTGGCGGAGCGGCGTGG
AAAAAGACCTCGATGAAGTTCTGCAGACCCACTCAGTGTTTGTAAATGTTTCTAAAGGTCAGGTTGCCAAAAAGG
AAGATCTCATCAGTGCGTTTGGAAACAGATGACCAAACTGAAATCTGTAAGCAGATTTTGACTAAAGGAGAAGTTC
AAGTATCAGATAAAGAAAGACACACAACTGGAGCAGATGTTTAGGGACATTGCAACTATTGTGGCAGACAAAT
GTGTGAATCCTGAAACAAAGAGACCATAACCGTGATCCTTATTGAGAGAGCCATGAAGGACATCCACTATTTCGG
TGAAAACCAACAAGAGTACAAAACAGCAGGCTTTGGAAGTGATAAAGCAGTTAAAAGAGAAAATGAAGATAGAAC
GTGCTCACATGAGGCTTCGGTTCATCCTCCAGTCAATGAAGGCAAGAAGCTGAAAGAAAAGCTCAAGCCACTGA
TCAAGGTCATAGAAAGTGAAGATTATGGCCAACAGTTAGAAATCGTATGTCTGATTGACCCGGGCTGCTTCCGAG
AAATTGATGAGCTAATAAAAAAGGAACTAAAGGCAAAGGTTCTTTGGAAGTACTCAATCTGAAAGATGTAGAAG
AAGGAGATGAGAAATTTGAATGACACCCATCAATCTCTTCACCTCTAAACAC

WO 2004/030615

PCT/US2003/028547

2476/6881
FIGURE 2277

MSIFTPTNQIRLTNVAVVRMKRAGKRFEIACYKNKVVGWRSGVEKDLDEVLQTHSVFVNVSKGQVAKKEDLISAF
GTDDQTEICKQILTKGEVQVSDKERHTQLEQMFRDIATIVADKCVNPETKRPYTVILIERAMKDIHYSVKTNKST
KQQALEVIKQLKEKMKIERAHMRLRFILPVNEGKKLKEKLKPLIKVIESEDYGQQLEIVCLIDPGCFREIDELIK
KETKGKGSLEVLNLKDVEEGDEKFE

WO 2004/030615

PCT/US2003/028547

2477/6881
FIGURE 2278

GACACTATCCGTGCGGCCAGGCGGAGACCCGGAGGACCGAAGCTTCCGGACGACGAGGAACCGCCCAACATGGCC
TCGGAGAGTGGGAAGCTTTGGGGTGGCCGGTTTGTGGGTGCAGTGGACCCCATCATGGAGAAGTTCAACGCGTCC
ATTGCCCTACGACCGGCACCTTTGGGAGGTGGATGTTCAAGGCAGCAAAGCCTACAGCAGGGGCTTGAGAGAAGGCA
GGGCTCCTCACC AAGGCCGAGATGGACCAGATACTCCATGGCCTAGACAAGGTGGCTGAGGAGTGGGCCCAGGGC
ACCTTCAA AACTGA AACTCCAATGATGAGGACATCCACACAGCCAATGAGCGCCGCCTGAAGGAGCTCATTGGTGCA
ACGGCAGGGAAGCTGCACACGGGACGGAGCCGGAATGACCAGGTGGTCACAGACCTCAGGCTGTGGATGCGGCAG
ACCTGCTCCACGCTCTC GGGCCCTCCTCTGGGAGCTCATTAGGACCATGGTGGATCGGGCAGAGGCGGAACGTGAT
GTTCTCTTCCCGGGGTACACCCATTTGCAGAGGGCCAGCCCATCCGCTGGAGCCACTGGATTCTGAGCCACGCC
GTGGCACTGACCCGAGACTCTGAGCGGCTGCTGGAGGTGCGGAAGCGGATCAATGTCTGCCCCCTGGGGAGGTGG
GGCCATTGCAGGCAATCCCCTGGGTGTGGACCGAGAGCTGCTCCGAGCAGAACTCAACTTTGGGGCCATCACTCT
CAACAGCATGGATGCCACTAGTGAGCGGGACTTTGTGGCCGAGTTCTGTCTGGGCTTCGCTGTGCATGACCCA
TCTCAGCAGGATGGCCGAGGACCTCATCCTCTACTGCACCAAGGAATTCAGCTTCGTGCAGCTCTCAGATGCCTA
CAGCACGGGAAGCAGCCTGATGCCCCAGAAGAAAAACCCCGACAGTTTGGAGCTGATCCGGAGCAAGGCTGGGCG
TGTGTTTGGGCGGTGTGCCGGGCTCCTGATGACCCTCAAGGGACTTCCCAGCACCTACAACAAAGACTTACAGGA
GGACAAGGAAGCTGTGTTTGAAGTGTGAGACACTATGAGTGCCGTGCTCCAGGTGGCCACTGGCGTCTCTCTAC
GCTGCAGATTACCAAGAGAACATGGGACAGGCTCTCAGCCCCGACATGCTGGCCACTGACCTTGCCTATTACCT
GGTCCGCAAAGGGATGCCATTCCGCCAGGCCCCACGAGGCCTCCGGGAAAGCTGTGTTTCATGGCCGAGACCAAGGG
GGTCGCCCTCAACCAGCTGTCACTGCAGGAGCTGCAGACCATCAGCCCCCTGTTCTCGGGCGACGTGATCTGCGT
GTGGGACTACGGGCACAGTGTGGAGCAGTATGGTGCCCTGGGCGGCACTGCGCGCTCCAGCGTTCGACTGGCAGAT
CCGCCAGGTGCGGGCGCTACTGCAGGCACAGCAGGCCTAGGTCTCCACACCTGCCCCCTAATAAAGTGGGCGC
GAG

WO 2004/030615

PCT/US2003/028547

2478/6881
FIGURE 2279

MASESGKLWGGRFVGAVDPIMEKFNASIAYDRHLWEVDVQGSKAYSRGLEKAGLLTKAEMDQILHGLDKVAEEWA
QGTFKLNSNDEDIHTANERRRKELIGATAGKLHTGRSRNDQVVDLRLWMRQTCSTLSGLLWELIRTMVDRAEAE
RDVLFPGYTHLQRAQPIRWSHWILRAIAGNPLGVDRELLRAELNFGAITLNSMDATSERDFVAEFLFWASLCMTH
LSRMAEDLILYCTKEFSFVQLSDAYSTGSSLMPQKKNPDSLELIRSKAGRVFGRCAGLLMTLKGLPSTYNKDLQE
DKEAVFEVSDTMSAVLQVATGVISTLQIHQENMGQALSPDMLATDLAYYLVRKGMPFRQAHEASGKAVFMAETKG
VALNQLSLQELQTIISPLFSGDVICVWDYGHVSVEQYGALGGTARSSVDWQIRQVRALLQAQQA

WO 2004/030615

PCT/US2003/028547

2479/6881
FIGURE 2280

CTCTTTCCCATCTTGCAAGATGGCAGGTGAAAAAGTTGAGAAGCCAGATACTAAAGAGAAGAAACCCGAAGCCAA
GAAGGCTGATGCTGGTGGCAAGGTGCAAGAGGGTAATCTTAAAGTTAAAAAGCCCAAGAAGGGGAAGCCCTATTG
CAGCCACAACCCTGTCCTTGTGAGAGGAAGTGGCAGGTATTCCCGATCTGCCATGTATTCTAGAAAGGCCATGTA
TAAGAGGAAGTACTCAGCCGCTAAATCAAAGATTGAAAAGAAAAAGGAGAAGGTTCTTGCAACTGTTACAAAACC
AGTTGGTGGTGACAAGAATGGTGGTACCCAGGTGGTTAAACTTCACAAAATGCCTAGATACTATCCTACCGAAGA
TGTACCTCGAAAGCTGTTGAGCCACAGCAAAAAACCCTTCAGTCAGCATGTGAGAAAAGTGAAGCCAGCATTAC
CCCTGGGACCATTCTGATCATCCTCACTGGATGCCACAGGGGCAAGAGGGTGGTTTTCTGAAGCAGCTGGCTAG
TGGCTTGTTACTTGTGACTGGACCTCTGGTCCTCAATTGAGTTTCTCTACGAGGAACACACCAGAAATTTGTCAT
TGCCACCTCAACCAAAATCGATATCAGCAATGTAAAAATCCCAAAACATCTTACTGATGCTTACTTCAAGAAGCA
GCAGCTGCGGAAGCCCAGACACCAGGAAGGCAACATCTTCGACACAGAAAAAGAGAAATATGAGATTACAGAGCA
GCGCAAGATTGATCAGAAAGCTGTGGACTCACAAATTTTACCAAAAGTCAAAGCTATTTCTCAGCTCCAGGGCTA
CCTGCGATCTGTGTTTGCCTGACGAATGGAATTTATCCTCACAAATTGGTGTCTAAATGTCTTAAGAACCTAA
TTAAATAGCTAAGTAC

WO 2004/030615

PCT/US2003/028547

2480/6881
FIGURE 2281A

CGCTTCCTGCGCCTCTTCAGGTCACCGCTTGCTCTAGTTCCCAGGCTTTGGCCTCTAGTGGATGAGAATCACCGA
GTCTGCGGGGCTGGACGCTGACCGCCCGGGCCAGCACCTAGGCGGGCGGGAGCTGTGCGGGCCAGGGTTCGCGCG
GGCCGGGTAGAGGCTCGAGCCGGGACCCCGAGCGTGAACCCCGAGCCAGCGGCGCTGGGGCCAGAGGGGGCCAG
GCGGGAGGTGGTGGCGGAGGCGAAGGGGCGACGGGACCTGGGGCTGGCCCGTGTGTCTCGGCGGCGCTGGCGC
CGGCCGTGCTGTACGGTGAGCCCCAGGGAGGCGGATCTGGGGCCCGAGAAGGACACCCGCTGGATTTGCCCCG
TAGGCCCCGGCCCGGGCCCCCTCGGGAGCAGAACAGCCTTGGTGAGGTGGACGGGAGGGGACTTCGCGAGCAGACGC
GCGCGCCAGCGACAGCAGCCCGCCCCGGCCTCTCGGGAGCCGTGGGGCAGAGGCTGCAGAGCCCCAGGAGGGGGC
CAGTGTCAATCAAAGATGTGGCTGTGGATTTACCCAGGAGGAGTGGTGGCAACTGGACCTGATGAGAAGATAA
CATACGGGGATGTGATGTTGGAGAACTACAGCCATCTAGTTTCCCTGGCTTATGAGGTGGCAACATCTTGTACTT
CGGAGATCTGAAGCCGAGCAACTTGCCCAAGTCCTTCTTCTTTTCCCATTAACAAGATATGATATCACCAAGCCA
AACGTCAATCAATTAAGTTGGAGCAGGGAGAGGAGCTGTGGATAACGGGAGGTGAATTTCCATGTCAACATAGTCCA
GCCCTTCACATCCTCAGCCGAAGATCTCACTTCTCTCCAGAGGCCTTTGCTGACTGACCCCTCAGGGATTGTGGG
ACTTTACCAAATCGGTTTGTAAATAACACCTAGAAGACGCTATCCGATCCATCAGGCCAGTATTCCTGTCTGGGG
GTACTTTCCACCGTGTGCTGGAATGGTTATCACAAGAAGGCTGTGCTGTCCCCCTCGCAACTCCAGGATGGTGTGT
AGCCAGTGACTGTGAGGATCGCCCCCTCTGACAGAAGATTTTCGCGTTCTGCGATACCAGAGCAGATAATCAGC
TCAACACTGTCTCTACCATCAAGTAACGCCCCAGACCCATGTGCAAAGGAGACAGTACTGAGTGCCCTCAAAGAG
AAGGAGAAGAAAAGGACAGTGGAGGAAGAAGACCAAATATTCCTTGATGGCCAGGAAAAATAAAGAAGGCGCCAT
GATAGCAGTGGCAGTGGACATTCAGCATTTGAGCCCCTGGTGGCCAAATGGAGTCCCCGCTTCTTTGTGCTAAG
CCTGGGTCTCTGAAGAGAGGCCTCAATTCTCAGAGCTCAGATGACCACTTGAATAAGAGATCCCGAAGCTCTTCC
ATGAGCTCCTTGACAGGCGCTTACGCAAGTGGCATCCCTAGCTCCAGCCGCAATGCCATTACCAGTCTCTACAGC
TCCACTCGAGGCATCTCAGCTCTGGAAGAGAAATGGCCCCAGTTTATCACCTTCTCTAGCCAGCCTCCTCC
CGCTCCCAGACACCGGAGAGGCCAGCAAAGAAAATAAGAGAAGAGGAGCTGTGTCATCATTCAGTCTCTCACT
CCATTGGCAGCAGACAGGGAGTCCAGGGAGAAAAGGCTGCAGATACAACCCCAAGGAAGAAACAAAACCTCGAAT
TCTCAGTCTACACCTGGCAGCTCTGGGCAGCGTAAGCGGAAAGTTGAGTGCTGCCTTCTCGGCGAGGGGAACAG
CTGACCTTGCCCTCCACCTCCCCAGCTTGGCTATTTCGATCACTGCCGAGGACCTAGACTTAGAGAAGAAGGCTTCA
TTACAGTGGTTCAACCAGGCCTTGGAGGACAAGAGCGATGCTGCCTCGAACTCTGTCACTGAGACCCACCTATC
ACTCAGCCTTCATTTACCTTTACCTTGCTGCTGCTGCACCTGCCCTCCCCACCCACCTCCCTCCTGGCCCCAAGC
ACCAACCCACTGTTAGAGAGCTTGAAGAAGATGCAGACTCCCCGAGCCTGCCACCCTGCCAGCCTTCTGCTGGA
GCAGCAACCACTGAGGCCCTCTCACCTCCAAAGACACCCAGCCTCCTACCCCGCTGGGTTTATCACAGTCAGGG
CCGCCAGGGCTGCTCCCCAGCCCCCTCCTTTGACTCCAACCCCGACCACCTTTGCTGGGGCTGATCCCTGCTCCA
TCCATGGTACCAGCCACTGACACCAAGGCACCTCCAAACCTTCAGGCAGAGACGGCTACCAAACCCCAAGCCACA
TCTGCCCCGTCCCCCGCCCCCAAGCAAAGCTTCTGTTTGAACACAGAACACCTCACCTTCCAGCCCTGCCGCC
CCTGCTGCATCTTCAGCACCTCCCATGTTCAAGCCCATTTTACGGCTCCACCCAAGAGTGAGAAGGAAGGCCCC
ACACGCCCTGGCCCTTCAGTCAAGCCACAGCGCCCTCAGCTCCTCCCTCCCCACGACCACCAGCACCACAGCC
CCGACCTTCCAGCCTGTCTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCCCTGCTCCCTTCTCAAGCAG
ACAATACTCCCGCCACTGCTCCCACCACAACCTGCCCGCTCTTCACTGGCCTGGCCAGCGCCACCTCTGCTGTG
GCTCCCATCACCTCTGCCAGTCCATCCACAGACTCTGCTTCGAAGCCTGCGTTTGGCTTTGGCATAAACAGTGTG
AGCAGCAGCAGTGTGAGTACCAGACAGCAGCCGCACTGCCGCTCAGACCTTCTCTTCCGGGGCGCCCCAG
GCCTCTGCTGCCAGCTTACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCTGCTTGGCCACAACC
ACCACAGTCACACCTTCAGCCAGTCCCTGCACACTGCCGTGCCAACGGCCACCAGCAGCAGCGCTGCCGACTTT
AGTGGTTTTTGGCAGCACCTCGCCACCTCCGCCCGGCCACCAGCAGCCAGCCACTCTGACGTTAGTAACACG
AGCACCCACAGTTCAACATTTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCGGGAGCCAAACCC
CAGCCCGCATTTGGGGCGCTGAGGGGCGAGCCACCGGGGCGGCCAAGCCGGCCCTTGCCCCAGCTTTGGCAGC
TCTTTCACTTTTGGAACTCTGCAGCCCCGCTGCTGCACCCACACCTGCACCTCCGTCCATGATCAAGGTCGTG
CCTGCGTACGTGCTACGCCATCCATCCTATCTTTGGCGGTGCCACGCACTCGGCGTTTGGGTGAAAGCCACG
GCTTCGGCCTTGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGCTCCACTGCTGTCTTCTTCGGTGCAGCC
ACCAGCTCCGGCTTTGGAGCCACCACCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTGTTTGGCAGCACAAACA
CCATCACCTTCACGTTTGGGGGTTTCGGCAGCCCCCGCTGGCAGTGGGAGCTTTGGGATCAATGTGGCCACCCCA

WO 2004/030615

PCT/US2003/028547

2481/6881
FIGURE 2281B

GGCTCCAGCACCACCACCGGAGCTTTCAGCTTTGGAGCAGGACAGAGTGGGAGCACAGCCACCTCCACCCCCTTC
GCAGGGGGCTTAGGTCAGAACGCCCTGGGCACCACCGGCCAGAGCACACCGTTTGCCCTTCAACGTGAGCAGCACA
ACTGAGAGCAAACCTGTGTTTGGAGGCACCGCCACCCCCACCTTTGGTCTGAACACCCCTGCGCCTGGAGTGGGC
ACATCAGGCAGCAGCCTCTCCTTTGGGGCATCCTCAGCACCCGCCAAGGCTTTGTTGGTGTGTCACCTTTCGGC
AACACTTTTGCTCACCAGCAAGAACACAGCCCGAGGAAGGGACCCAATAACCTTTCAAAACGCAAACCTGCTGCCT
GCGGTGAGGGCCAGGGTCTTCCACGGAGAGGACAGGCATCTCCTTTCCCACCAGGAAGGAGTGAGCCCGGAGC
CTCTGCTATGTGCAAGGCGGTGTGCAAGCACCGGCTGCAGCTTTTGGCTCTCTTCTTTCTCTTTGGGGCTGGGCT
GGGTGTGCGTTCTGGTGTGATGCTTTGGCCTGTGAGGCTGAGCTAGAGAAATGTAGATGTTAGATGTGCCAGTA
CCATCCTGCGCCTCCCAAGCATGCCCCACTCACTCACGTCGGCATCTCGACCCGTTCAATTACAGCAACGAAGA
AGCCACCGCTAAGCGTGGTCTTGGGGGAAGCCCGGAGGCAGTGCTCGGCACCCGGGAACGTGCTCAGGCCTCGGT
GGGGCCGGGCAGGCAGGGCGGGAGCTAGCCTGCAAGAGAAACAGCCCCAATGCTGGGTAAAGAGAGCAGTTCACCC
CATCCCCCCTCCACGACCTGGCGCACGCCCTGTACCTGAAGGCGCCCGGTTCTGCTGCAGCGCATCTTGATC
CATGTCTTCATTCTCCTCCTGGCAGAGGGAGCACATGGAGTAGACGAGCCGCTGCAGGGAAGGGAAAGTGAGCGC
GTGGCACAGGGCTCGCTGCTGGAACCTGCCAGGGCATGCAGACGCACCGGGCTAGGTGTCCCTGCCCGGGCTC
CTCCAGCTGTCTGCTCGGCATACCTAAGGAAAAGCGTGTCTCGGTTACACAGCTTCACAGGCTGCCTCAGTCCTG
AAATCCTCGCTCCTGAAATCCTCGCTTACAGAGGAGAACTTTTGCTCCAGGGTCCCAAGCCCCATTAAAGTGTC
GAACTAAGACCAAACAGATGACTCCAGGTCTAAGCTGCTGTGGACCTCTGAGTCCCTCAGCCACGCCTTCTCAC
CATCTCACCCGAGCCACTGCAGGAAGGATCCAGCAGGACATAGTGGACCTCACGATAGCGCGGATCTAAGGGGGA
GACCGCCAGGAAGTCTCCTCAGCCAGCTCACAGCAGGAGACGCCAGCCAGGCCAGCAGCGTGGCCATGGATGC
CAGCCGCTGGCATCCAGGTCAAAGGCAAAGATCTTCCTAGGGCAGAGGGCAGAGCAGGGGTGAGCTGAGCATGC
ATGGAGCAGCTAAGGECCTGTACAGCTGACACAGACAACCAGAACATGCAGGTTAAGCCAGGACACACAATATT
GAAACAGCCTATATTTAAAGGGCCAGGGTCAGAGGTAAGTGGCCTGGGGTCTCTGCCCAAGGGCTAAGGGATC
CACATCTCACACCTGCAGTGGGGAAAGCTTAGCTTGGGGCAAATACCGTGAACCTTTGGTGCAGCAGGAAAGA
GTTAAGCGAAAGTCATCCTTTACGCCCTTCAATACCCACTGAAAGGCACAAAATCAAACCCCATCTCCTCCTCCTC
CTCCTGTGGCACTCACCCCTTGGTCTTTCAGAAGAGCAGCCAAGTGACTGGTCTTTATTGCCCTGGGGTGGCACAGG
CATCCATGACATGGGAGCCTGGCGGGGGTCCAGCAGCATGGCTGGGAGACAGCTGGCCTGGCAGGCAACACAG
GGGCGGGGTAAACAGAGACCCCAGGCTAGGCCCTTCCCGTGCCTACACATTCTTCCCTTTTCTATTCTCTTGCC
TACCCTGTCTGCAAGATGAGGTGTCCGGCCCGGTACAGTGGGTGTTTATGCAGATCTGTCTGGGCGGGAAACAC
CAGCAGCTCCGGCATCAAGGGGTCCAGGAGAAAATGCTTCCCCTTGAGGGCTCGTAAGTCATCGAGGCTGCCAGG
GAAGAACCATTTCATTTCATTTTCTGAAATTTCTCCCTGCCAGGCCCTATTTCAACGGTCCATTTCATGCAACAA
TGTTACCACAGCTATGGAGAAATCAACAGGGTGATAAGGGAATCCGGGATCCGCAGTTGAGGGAATGGGTTGTCA
AGCCAGACTTATGGGTGAGGAGCCCCCTCTACTGTTTACCAGCAGTGGGAGCCTGGGCAAGTGATTCAATCTCAA
GCCCCACTGGCATCTCTGTAAATAGTAGGTGTGAGGATTCAATGAGCCAATATATCCAAGATACTTACGTGCCA
CAATTTAATAAATGTTAGCTATTCTGTGAGGAGTGAAGCATAACCTTGGAGAAAGGTTACTTTACAGGGGGGTGAGGAGT
GGGGAAGTGAGAGCTGAGCTCATTCTTGATGGATGAGGAGTTAGTCATGTGAGGCGCTTAGGTTAAACTACATT
CACTATAACTCAGTAAAGCAGTCCCGCCCACTCTCCGACCCATGCAGAAATAGGCCTAGGGAGTCACATGTCTCA
GTTTCAAGAAATCTATCGAAGTGGCAGAGCTGGAATTCAAACACAAGCAGCCGTTCTCTGCTATTCCACCCTGGTGT
CCAAGCAACATGGTAGGGCAGAAGGAAGAGGATCTTACAAAGAGTAAGGGAAAGGGAGAGGGGCAGAGGCTGCTT
CTCAGAGCCACCAAAGGACAAAATAAGACAGGTGTGAGCCAGTGGAGGAGGCACGGGGCAGAGACCAGCCACTG
TTGCTGGCAGCCTGGTGCACGTAGCACTGTGGCAGATGGACCTGGAGAGGAAGCAGGAGGGACAGCACAAATGGAG
CCAAGAAAGGACTTAGCATGGCCGGGCGCGGTGGTTTATGCCTGTAATCCAGCATTTTGGGAGGCCAAGGTGGG
CAGATCACCTGAGGTGAGGAGTTTGGAGACAGCCTGGCCAACATGGAGAAATCCCGTCTCTACTAAAAATACAAA
ATTAGCCAGGCATGGTGTGCTGCAATCCTGTAGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTG
TGTAAGAAAGGAAGACATAAGAAATTCATTTTACCTGTACCTTGAACAATTGGTTGGCTGAGATGCTGTTAAT
TTGTGACTTTGCCCCAAATTTGAGCTCACAAAACATGTGTTGTATGGAATCAAGGTTTAAAGGATCTAGGGCTG
TGCAGGACATGCCTTGTTAATAAAACGTTTACAAGC

WO 2004/030615

PCT/US2003/028547

2482/6881
FIGURE 2282

GCCAGGGAGCACTGGAGGCCACCCAGTCATGGGGGACACCTTCATCCGTCACATCGCCCTGCTGGGCTTTGAGAA
GCGCTTCGTACCCAGCCAGCACTATGTACATGTTCCCTGGTGAAATGGCAGGACCTGTCGGAGAAGGTGGTCTACC
GGCGCTTCACCGAGATCTACGAGTTCCATAAAACCTTAAAAGAAATGTTCCCTATTGAGGCAGGGGCGATCAATC
CAGAGAACAGGATCATCCCCACCTCCCAGCTCCCAAGTGTTTTGACGGGCAGCGGGCCGCCGAGAACCACCAGG
GCACACTTACCGAGTACTGCGGCACGCTCATGAGCCTGCCCACCAAGATCTCCCGCTGTCCCCACCTCCTTGACT
TCTTCAAGGTGCGCCCTGATGACCTCAAGCTCCCCACGGACAACCAGACAAAAAGCCAGAGACATACTTGATGC
CCAAAGATGGCAAGAGTACCGCGACAGACATCACCGGCCCCATCATCCTGCAGACGTACCGCGCCATTGCCAACT
ACGAGAAGACCTCGGGCTCCGAGATGGCTCTGTCCACGGGGGACGTGGTGGAGGTCGTGGAGAAGAGCGAGAGCG
GTTGGTGGTTCTGTTCAGATGAAAGCAAAGCGAGGCTGGATCCCAGCATCCTTCCTCGAGCCCCCTGGACAGTCCTG
ACGAGACGGAAGACCTGAGCCCAACTATGCAGGTGAGCCATACGTCGCCATCAAGGCCTACACTGCTGTGGAGG
GGGACGAGGTGTCCCTGCTCGAGGGTGAAGCTGTTGAGGTAATTCACAAGCTCCTGGACGGCTGGTGGGTCATCA
GGAAAGACGACGTACAGGCTACTTCCCGTCCATGTACCTGCAAAAGTCAGGGCAAGACGTGTCCCAGGCCCAAC
GCCAGATCAAGCGGGGGGCGCCGCCCGCAGGTGTCATCCGCAACGTGCACAGCATCCACCAGCGGTGCGGGA
AGCGCCTCAGCCAGGACGCCTATCGCCGCAACAGCGTCCGTTTTCTGCAGCAGCGACGCCGCCAGGCGCGGCCGG
GACCGCAGAGCCCCGGGAGCCCGCTCGAGGAGGAGCGGCAGACGCAGCGCTCTAAACCGCAGCCGGCGGTGCCCC
CGCGGCCGAGCGCCGACCTCATCCTGAACCGCTGCAGCGAGAGACCAAGCGGAAGCTGGCGTCTGCCGTCTTGAG
GCTGGAGCGCAGTCCCCAGCTAGCGTCTCGGCCCTTGCCGCCCGTGCCTGTATATACGTGTTCTATAGAGCCTG
GCGTCTGGACGCCGAGGGCAGCCCCGACCCCTGTCCAGCGCGGTCCCGCCACCCTCAATAAATGTTGCTTGAG
TGGACCGAGGCTCTGCAGGAATGCAGGGAGGGCCGGGCTCCGCCCCAGGGTTATTTCTAAGTTGA

WO 2004/030615

PCT/US2003/028547

2483/6881
FIGURE 2283

MYMFLVKWQDLSEKVVYRRFTEIYEFHKTLEMFPIEAGAINPENRIIPHLPA PKWFDGQRAAENHQGTLTEYCG
TLMSLP TKISRCPHLLDFFKVRPDDLKLPTDNQTKKPETYLMPKDGKSTATDITGP IILQTYRAIANYEKTSGSE
MALSTGDVVEVVEKSESGWWFCQMKAKRGWIPASFLEPLDSPDETEDPEPNYAGEPYVAIKAYTAVEGDEVSLLE
GEAVEVIHKLLDGWWVIRKDDVTGYFPSMYLQKSGQDVSQAQRQIKRGAPPRSSIRNVHSIHQSRKRKLSQDAY
RRNSVRFLQQRRRQARPGPQSPGSPLEERQTQRSKPQPAVPPRP SADLILNRCSESTKRKLASAV

WO 2004/030615

PCT/US2003/028547

2484/6881
FIGURE 2284

CCCCGCGCTGCGCGGAGCAGGGACCAGGCGGTTGCGGCGGCGACAGCCATGCGCCGGCGCGCTGGCAGGTCTGGCC
GCGGGCTTGAGGTCCCGCGGGTTCGCGCCAGCCCAGACTCGGACTCGGACACAGACTCGGAGGACCCGAGTCTC
CGGCGCAGCGCGGGCGGCTTGCTCCGCTCGCAGGTTCATCCACAGCGGTCACTTCATGGTGTCTCGCCGCACAGC
GACTCGCTGCCCCGGCGGCGCGACCAGGAGGGGTCCGTGGGGCCCTCCGACTTCGGGCGCGCAGTATCGACCCC
ACACTCACACGCCCTCTTCGAGTGTCTGAGCCTGGCCTACAGTGGCAAGCTGGTGTCTCCCAAGTGGAAGAATTC
AAAGGCCCTCAAGCTGTCTGTCAGAGACAAGATCCGCCTGAACAACGCCATCTGGAGGGCCTGGTATATCCAGTAT
GTGAAGCGGAGGAAGAGCCCCGTGTGTGGCTTCGTGACCCCCCTGCAGGGGCTGAGGCTGATGCGCACCCGAAG
CCGGAGGCCGTGGTCTGGAGGGGAACCTGGAAGCGCGCATCGAGGTGGTGTGCGGGAATACCACAAGTGG
CGCATCTACTACAAGAAGCGGCTCCGTAAGCCCAGCAGGGAAGATGACCTCCTGGCCCCCTAAGCAGGCGGAAGGC
AGGTGGCCCGCCGCGGAGCAATGGTGCAAACAGCTCTTCTCCAGTGTGGTCCCCGTGCTGCTGGGGGACCCAGAG
GAGGAGCCGGGTGGGCGGCAGCTCCTGGACCTCAATTGCTTTTTGTCCGACATCTCAGACACTCTCTTACCATG
ACTCAGTCCGGCCCTTCGCCCCGTGCAGCTGCCGCTGAGGATGCCTACGTGCGCAATGCTGACATGATCCAGCCG
GACCTGACGCCACTGCAGCCAAGCCTGGATGACTTCATGGACATCTCAGATTTCTTTACCAACTCCCGCCTCCCA
CAGCCGCCCATGCTTCAAACCTTCCCAGAGCCCCCAGCTTCAGCCCCGTGGTTGACTCCCTCTTCAGCAGTGGG
ACCTGGGGCCAGAGGTGCCCCCGGCTTCCTCGGCCATGACCCACCTCTCTGGACACAGCCGTCTGCAGGCTCGG
AACAGCTGCCCTGGCCCCCTGGACTCCAGCGCCTTCCTGAGTTCTGATTTCTCTCTTCTGAAGACCCCAAGCCC
CGGCTCCACCCCTCCTGTACCCCCACCTCTGCTGCATTACCTCCCCCTGCCAAGGTGCCAGGCCTGGAGCCC
TGCCCCCACCCTCCCTTCCCTCCCATGGCACCACCCACTGCTTTGCTGCAGGAAGAGCCTCTCTTCTCTCCCAGG
TTCCCTTCCCCACCGTCCCTCCTGCCCCAGGAGTGTCTCCGCTGCCTGCTCCTGCAGCCTTCCCACCCACCCCA
CAGTCTGTCCCCAGCCCAGCCCCCACCCTTCCCCATAGAGCTTCTACCCTTGGGGTATTTCGGAGCCTGCCTTT
GGGCTTGCTTCTCCATGCCAGAGGCAAGCCCCCGCUCCATCCCCTAGGGGACAGAAAGCCAGCCCCCTACC
TTAGCCCCTGCCACTGCCAGTCCCCCACCCTGCGGGGAGCAACAACCCCTGCCTCACACAGCTGCTCACAGCA
GCTAAGCCGGAGCAAGCCCTGGAGCCACCACTTGATCCAGCACCTCCTCCGGTCCCCAGGGTCCCCGCAGGAG
ACAGTCCCTGAATTCCCTGCACATTCTTCCCCGACCCCGGCCCTACACCGCCCCGGCCACCTCCAGGCCCG
GCCACATTGGCCCCCTCCAGGCCCTGCTTGTCCCCAAAGCGGAGCGGCTCTCACCCCCAGCGCCAGCGGCAGT
GAACGGCGGCTGTGAGGGGACCTCAGTCCATGCCAGGCCCTGGGACTCTGAGCGTCCGTGTCTCTCCCCGCAA
CCCATCCTCAGCCGGGGCCGTCCAGACAGCAACAAGACCGAGAACCGGCGTATCACACACATCTCCGCGGAGCAG
AAGCGGCGCTTCAACATCAAGCTGGGGTTTGACACCCTTCATGGGCTCGTGAGCACACTCAGTGCCAGCCCAGC
CTCAAGGTGAGCAAAGCTACCACGCTGCAGAAGACAGCTGAGTACATCCTTATGCTACAGCAGGAGCGTGCGGGC
TTGCAGGAGGAGGCCAGCAGCTGCGGGATGAGATTGAGGAGCTCAATGCCGCCATTAACTGTGCCAGCAGCAG
CTGCCCCGCACAGGGGTACCCATCACACACCAGCGTTTTGACCAGATGCGAGACATGTTTGATGACTACGTCCGA
ACCCGTACGCTGCACAACCTGGAAGTTCTGGGTGTTGAGCATCTCATCCGGCTCTGTTTGAGTCTTCAACGGG
ATGGTGTCCACGGCAAGTGTGCACACCCTCCGCCAGACCTCACTGGCCTGGCTGGACAGTACTGCTCTCTGCC
GCTCTCCGGCCAAGTGTCTGAACTCCCTACGCCAGCTGGGCACATCTACCAGTATCCTGACCGACCCGGGCCG
ATCCCTGAGCAAGCCACACGGGCAGTCACAGAGGGCACCTTGGCAAACCTTTATAGTCTGGCCAGACCCTGCT
GCTCACTCAGCTGCCCTGGGGGCTGCTTTCCCTGGGCACGGGCTCCAGGGATCATCTCTGGGCACCTCCCTG
CCCCAGGCCCTGGCTCTGCCCTTCCCTGGGGGGTGGAGCAGGGTCCAGGTTTCACACTTGCCACCTCCTGGAGGT
CAAGAAGAGCAGAGTCCCCGTCCCTGCTCTGCCACTGTGCTCCAGCACCGTGACCTTGGGTGACTCGTCCGCTGT
CTTTGGACCGCTGTGTTTTCAATCTGCAAAATGGGGATGGGGAAGGTTCAATCAGCAGATGACCCCCAGGCCTTG
CAGCTGTGACATTGGGGGCTAGGCTGGCAACTCCGGGGGCTCAACGGTGGAAAGAGGAGGATGCTGTTTATCTG
TCACCTCCACTTGCTCCCCGACAGGTGGGGCACAGACCTCTGTTCTGAGCAGAGAAGCAGAAAAGGAGGTTCCC
TCTCTGCTCCTTCACTGCTGACCCAGAGGGGCTGCAGGATGGTTTCCCTGGGAGAGGCCAGGAGGGCCTGAT
CCCAGGAGACACCAGGGCCAGAGTGACCACAGCAGGGCAGGCATCATGTGTGTGTGTGTGTGGATGTGTGTGT
GTGGGTTTTGTAAAGAATTCTTGACCAATAAAAGCAAAACTGTCTGCTGGTTAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2485/6881
FIGURE 2285

MAGALAGLAAGLQVPRVAPSPDSDSDTSEDPSLRRSAGGLLRSQVIHSGHFMVSSPHSDSLPRRRDQEGSVGPS
DFGPRSIDPTLTRLFECLSLAYSGKLVSPKWKNFKGLKLLCRDKIRLNNAIWRAYIIQYVKRRKSPVCGFVTPLQ
GPEADAHRKPEAVVLEGNWKRRIEVMREYHKWRIYYKKRLRKPSREDDLLAPKQAEGRWPPPEQWCKQLFSSV
VPVLLGDPEEEPPGGRQLLDLNCFLSDISDTLFTMTQSGPSPLQLPPEDAYVGNADMIQPDLTPLQPSLDDFMDIS
DFFTNSRLPQPPMPSNFPEPPSFSPVVDLSLFSSGTLGPEVPPASSAMTHLSGHSRLQARNSCPGPLDSSAFLSSD
FLLPEDPKPRLPPPPVPPPLHYPPPAKVPGLEPCPPPPFFPMAPPTALLQEEPLFSRPFPPFTVPPAPGVSPLP
APAAFPPTPQSVSPAPTFFPIELLPLGYSEPAFGPCFSMPRGKPPAPSPRGQKASPPTLAPATASPPTTAGSNN
PCLTQLLTAAKPEQALEPPLVSSTLLRSPGSPQETVPEFFCTFLPPTPAPTTPRPPPGPATLAPSRPLLVPKAER
LSPPAPSGSERRLSGDLSSMPGPGTILSVRVSPQPILSRGRPDSNKTENRRITHISAEQKRRFNKLGFDTLHGL
VSTLSAQPSLVSKATTLQKTAEYIILMLQQERAGLQEEAQQLRDEIEELNAAINLCQQQLPATGVPI THQRFQDM
RDMFDDYVRTRLHNWKFWVFSILIRPLFESFNGMVSTASVHTLRQTS LAWLDQYCSLPALRPTVLNSLRQLGTS
TSILTDPGRIPEQATRAVTEGTLGKPL

WO 2004/030615

PCT/US2003/028547

2486/6881

FIGURE 2286

CCCCGCGCTGCGCGGAGCAGGGACCAGGCGGTTGCGGCGGCGACAGCCATGGCCGCGCGCTGGCAGGTCTGGCC
GCGGGCTTGCAAGTCCCGCGGGTCGCGCCAGCCAGACTCGGACTCGGACACAGACTCGGAGGACCCGAGTCTC
CGGCGCAGCGCGGGCGGCTTGCTCCGCTCGCAGGTTCATCCACAGCGGTCACTTCATGGTGTCTGTCGCCGCACAGC
GACTCGCTGCCCCGGCGGCGCGACCAGGAGGGTCCGTGGGGCCCTCCGACTTCGGGCGCGCAGTATCGACCCC
ACACTCACACGCTCTTCGAGTGCTTGAGCCTGGCCTACAGTGGCAAGCTGGTGTCTCCCAAGTGAAGAATTTT
AAAGGCCCTCAAGCTGCTCTGCAGAGACAAGATCCGCCTGAACAACGCCATCTGGAGGGCCTGGTATATCCAGTAT
GTGAAGCGGAGGAAGAGCCCCGTGTGTGGCTTCGTGACCCCCCTGCAGGGGCCTGAGGCTGATGCGCACCGGAAG
CCGAGGCCGTGGTCTTGAGGGGAACTACTGGAAGCGGCGCATCGAGGTGGTGTGCGGGAATACCACAAGTGG
CGCATCTACTACAAGAAGCGGCTCCGTAAGCCAGCAGGGAAGATGACCTCCTGGCCCCCTAAGCAGGCGGAAGGC
AGGTGGCCGCCCGCGGAGCAAATGGTGCAAAACAGCTCTTCTCCAGTGTGGTCCCCGTGCTGCTGGGGGACCCAGAG
GAGGAGCCGGGTGGGCGGCAGCTCCTGGACCTCAATTGCTTTTTGTCCGACATCTCAGACACTCTCTTCACCATG
ACTCAGTCCGGCCCTTCGCCCCTGCACTGCCGCTGAGGATGCCTACGTCGGCAATGCTGACATGATCCAGCCG
GACCTGACGCCACTGCAGCCAAGCCTGGATGACTTCATGGACATCTCAGATTTCTTTACCAACTCCCGCCTCCCA
CAGCCGCCCATGCTTCAAACCTTCCCAGAGCCCCCAGCTTCAGCCCCGTGGTTGACTCCCTCTTCAGCAGTGGG
ACCCTGGGCCCAGAGGTGCCCCCGGCTTCTCGGCCATGACCCACCTCTCTGGACACAGCCGTCTGCAGGCTCGG
AACAGCTGCCCTGGCCCCCTTGACTCCAGCGCCTTCCTGAGTTCTGATTTCTCCTTCCTGAAGACCCCAAGCCC
CGGCTCCCACCCCTCCTGTACCCCCACCTCTGCTGCATTACCTCCCCCTGCCAAGGTGCCAGGCCTGGAGCCC
TGCCCCCACCTCCCTTCCCTCCCATGGCACCACCCACTGCTTTGCTGCAGGAAGAGCCTCTCTTCTCTCCCAGG
TTTCCCTTCCCCACCGTCCCTCCTGCCCCAGGAGTGTCTCCGCTGCCTGCTCCTGCAGCCTTCCCACCCACCCCA
CAGTCTGTCCCCAGCCCAGCCCCACCCCTTCCCCATAGAGCTTCTACCCTTGGGGTATTCCGGAGCCTGCCTTT
GGGCTTGCTTCTCCATGCCCAGAGGCAAGCCCCCGCCCCATCCCCTAGGGGACAGAAAGCCAGCCCCCTACC
TTAGCCCCTGCCACTGCCAGTCCCCCACCCTGCGGGGAGCAACAACCCCTGCCTCACACAGCTGCTCACAGCA
GCTAAGCCGGAGCAAGCCCTGGAGCCACCCTTGTATCCAGCACCTCCTCCGGTCCCCAGGGTCCCCGCAGGAG
ACAGTCCCTGAATTCCCTGCACATTCTTCCCCGACCCCGGCCCTACACCGCCCCGGCCACCTCCAGGCCCG
GCCACATTGGCCCCCTTCCAGGCCCTGCTTGTCCCCAAAGCGGAGCGGCTCTCACCCCCAGCGCCAGCGGCAGT
GAACGGCGGCTGTGAGGGGACCTCAGCTCCATGCCAGGCCCTGGGACTCTGAGCGTCCGTGTCTCTCCCCGCAA
CCCATCTCAGCCGGGGCCGTCCAGACAGCAACAAGAACCGGCGTATCACACACATCTCCGCGGAGCAGAAGCGG
CGCTTCAACATCAAGCTGGGGTTTGACACCTTTCATGGGCTCGTGAGCACACTCAGTGGCCAGCCAGCCTCAAG
GTGACAAAGCTACCACGCTGCAGAAGACAGCTGAGTACATCCTTATGCTACAGCAGGAGCGTGCGGGCTTGCA
GAGGAGGCCAGCAGCTGCGGGATGAGATTGAGGAGCTCAATGCCGCCATTAACCTGTGCCAGCAGCAGCTGCCC
GCCACAGGGGTACCCATCACACACCAGCGTTTTTGACCAGATGCGAGACATGTTTGATGACTACGTCCGAACCCGT
ACGCTGCACAAC TGGAAGTTCTGGGTGTTT CAGCATCTCATCCGGCTCTGTTTGAGTCCTTCAACGGGATGGTG
TCCACGGCAAGTGTGCACACCTCCGCCAGACCTCACTGGCCTGGCTGGACCACTGCTCTCTGCCCCGCTCTC
CGGCCAACTGTCTGAACTCCCTACGCCAGCTGGGCACATCTACCACTATCCTGACCGACCCGGGCGCATCCCT
GAGCAAGCCACACGGGCAGTCACAGAGGGCACCCCTTGGCAAACCTTTATAGTCTCTGGCCAGACCTGCTGCTCAC
TCAGCTGCCCTGGGGGCTGCTTTCCCTGGGCACGGGCTCCAGGGATCATCTCTGGGCACTCCCTTCTGCCCCAG
GCCCTGGCTCTGCCCTTCCCTGGGGGGTGGAGCAGGGTCCAGGTTTCACACTTGCCACCTCCTGGAGGTCAAGAA
GAGCAGAGTCCCCGTCCCTGCTCTGCCACTGTGCTCCAGCACCGTGACCTTGGGTGACTCGTCCGCTGTCTTTGG
ACCGCTGTGTTTCAATCTGCAAAATGGGGATGGGGAAGGTTCAATCAGCAGATGACCCCCAGGCCTTGGCAGCTG
TGACATTGGGGGCTAGGCTGGCAACTCCGGGGGCTCAACGGTGGAAAGAGGAGGATGCTGTTTATCTGTACCT
CCACTTGCTCCCCGACAGGTGGGGGCACAGACCTCTGTTTCTGAGCAGAGAAGCAGAAAAGGAGGTTCCCTCTCTC
TGCTCCTTCACTGCTGACCCAGAGGGGCTGCAGGATGGTTTTCCCTGGGAGAGGCCAGGAGGGCCTGATCCAGG
AGACACCAGGGCCAGAGTGACCACAGCAGGGCAGGCATCATGTGTGTGTGTGTGTGTGGATGTGTGTGTGTGGGT
TTTGTAAGAATTCTTGACCAATAAAAGCAAAAACCTGTCTGCTGGTTAAAAA

WO 2004/030615

PCT/US2003/028547

2487/6881
FIGURE 2287

MAGALAGLAAGLQVPRVAPSPDSDSDTDSDEP SLRRSAGGLLRSQVIHSGHEMVSSPHSDSLPRRRDQEGSVGPS
DFGPRSIDPTLTRLFECLSLAYSGKLVSPKWKNFKGLKLLCRDKIRLNNAIWRAWYIQYVKRRKSPVCGFVTPLO
GPEADAHRKPEAVVLEGNYWKRRIEVVMREYHKWRIYYKKRLRKPSREDDLLAPKQAEGRWPPPEQWCKQLFSSV
VPVLLGDPEEEPGGRQLLDLNCFLSDISDTLFTMTQSGPSPLQLPPEDAYVGNADMIQPDLTPLQPSLDDFMDIS
DFFTNSRLPQPPMPSNFPEPPSFSPVVDLSFSSGTLGPEVPPASSAMTHLSGHSRLQARNSCPGPLDSSAFLSSD
FLLPEDPKPRLPPPPVPPPLHYPPPAKVPGLEPCPPPPFPPMAPPTALLQEEPLFSRPFPPFTVPPAPGVSPPLP
APAAFPPTPQSVSPAPTTFPIELLPLGYSEPAFGPCFSMPRGKPPAPSPRGQKASPPTLAPATASPPTTAGSNN
PCLTQLLTAAKPEQALEPPLVSSTLLRSPGSPQETVPEFPCTFLPPTPAPTPPRPPPGPATLAPSRPLLVPKAER
LSPPAPSGSERRLSGDLSSMPGPGTLSVRVSPPQPILSRGRPDSNKNRRITHISAEQKRRFNIKLGFDTLHGLVS
TLAQPSLVSKATTTLQKTAEYIILMLQERAGLQEEAQQLRDEIEELNAAINLCQQQLPATGVPITHQRFQMRD
MFDDYVRTRTLHNWKFWVFSILIRPLFESFNGMVSTASVHTLRQTS LAWLDQYCSLPALRPTVLNSLRQLGTSTS
ILTDPGRIPEQATRAVTEGTLGKPL

WO 2004/030615

PCT/US2003/028547

2488/6881

FIGURE 2288

GACGGCAAATGCGGACTTCGACACCTACGACGATCGGGCCTACAGCAGCTTCGGCGGCGGCAGAGGGTCCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCAGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGACGGCTAG
TCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCACCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGAATGGGTAGCTCTCGAGAATCTAGAGGTGGAT
GGGATTCCCGGGATGACTTCAATTCTGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAGGTAGTCGCCCAGGCG
ACCGGCGAACAGGCCCCCCCCATGGGCAGCCGCTTCAGAGATGGCCCTCCCCTCCGTGGATCCAACATGGATTTC
GAGAACCCACAGAAGAGGAAAGAGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAGTCGCGACGCCCCCTCA
ATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGAAGTCGTTCAAAAGGAGCAAG
AATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGGTGAGTCCCCGGGCAG
CCGTCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCTTGTGAGTGCATGTCA
GCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTTTGTGCGTTTTTTTCT
TTCTTCCGCTGCTTCCCCATTTTCTTCTGTCTTTTTTCTCTGCTCCTTGTTTTTCCCAGCAGCACATGGGGTTC
CTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTTGGGCTGCGGTGCTGCGTCATTTTTCTTTGCTTTCTC
TTTACTTTAGACACTGGCCCAACTCCAGGCGTTTTCTTTTATTCCCTCAGTGCTTCTCTTCTGACCTGCATGTTG
AGTTCTGTATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACAGCAGAGACCTTGTTGGTATT
CAGCTGTGATGGATATAGAGAATCAGAGGCACCTTGTTTTTCAAACTAGGATAAAAAATATCTGCAGGGTCTTTTC
CATTCTATTAGAGGGAGTCTGGCTCCATGACCCCTCCCGAGTGGACTGTCCAAGCAGATAGGCTCACACGA
GAAACAGTGAGGCTGAAAGGGGGGGCTATGGAAGAGCGGTAGGGAGTCCACGGAGAAGATGCAGTGAATGCTTGC
ATGCATTACACGCTGTGTGTGTCCAGCTAGTTCACTCCTTTGCGCGTGCGTGGTGGAGGCTGGCCTCTCTGGCT
GGGTGCACTGAATGGCCAGCGGGTTTTCTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGAGGGGGTGGTGCTGGT
GCTGCACTGGGCTGACTGCGGCGCTGACGCAGCGTTTTCCCCCATCCCTGTTGCCTGTGTGTGTGTGGATCTGT
TCCTAGTATAGGCAACATAATGAGATACTGTGCTTCCCACCTCCCCTTCAGTTCAGAGCCAAATGGGTCTAGAA
TCTGGCACTTTACTCATTTTCTTTGATAAATTGTACTATGCAGAGCTGTCAGGAACCTTCAGATAGCAGTAGAGG
ACTGCAGCTGTCTAGGTCTGCGGCCACATCTTGGGGACACACTGGACTGTTCCCATGTGCAGGGTTTCAGCAGTTA
TGTGGGAGTGCTAGGGGTTAGGCTTTGAGCTTGAACGCCTGCGTGTGAACAGATGAAAAATCCTTCAGTACCCA
AGTCCCAGTCTGTCTATGGGGAGCAGTTTGGGGGCGGCCGAGCAGGAGCCTGGGAAAGAGGCCCTCGCCAGG
TGATGGCAGGGCCAGGGTGGCCTGGGGCACCCAGCGGAATGTGCTTAGTATTTGGTCAACAGCCGTCATCCTGGG
CTTTTCTACTGTGTCTTGTACAAGGCCTCAGCAATCCACAGAACTCTCTCTCCTTCCCTTCCACCTGTGAGCTT
CTCTGCTTCTGAGATAAGAACCATTGTGTAAACCAACACTTAACCTCAGAAAGACATGCATTATGTGGTGTA
TCAAACCCGATGCTTTCAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACAAAACACATGCATCTA
AACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACACATTAGCTATATGAC
AGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAAAGAAAACCTTACGTAATATTT

WO 2004/030615

PCT/US2003/028547

2489/6881
FIGURE 2289

MADFDTYDDRAYSSFGGGRGSRGSAGGHGSRSQKELPTEPPYTAYVGNLPFNTVQGDIDAIFKDLSIRSVRLVRD
KDTDKFKGFCYVEFDEVDSLKEALTYDGALLGDRSLRVDIAEGRKQDKGGFGFRKGGPDDRGMGSSRESRGGWDS
RDDFNSGFRDDFLGGRGGSRPGDRTGPPMGSRFRDGPPLRGSNMDFREPTTEERAQRPRQLKPRTVATPLNQV
ANPNSAIFGGARPREEVVQKEQE

WO 2004/030615

PCT/US2003/028547

2490/6881
FIGURE 2290

GACGGCAAATGCGGACTTCGACACCTACGACGATCGGGCCTACAGCAGCTTCGGCGGCGGCAGAGGGTCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCAGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAAGGAGTGACGGCTAG
TCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAG
GTAGTCGCCCAGGCGACCGGCGAACAGGCCCCCCCATGGGCAGCCGCTTCAGAGATGGCCCTCCCTCCGTGGAT
CCAACATGGATTTAGAGAACCCACAGAAGAGGAAAGAGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAG
TCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCCTAGAGAGGAAGTCG
TTCAAAGGAGCAAGAATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGG
TGAGTCCCCGGGCAGCCGTCTGTCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCT
TGTGAGTGCATGTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCGTGT
TGTGCGTTTTTTTTCTTTCTTCCGCTGCTTCCCCATTTTCTTCTGTCTTTTTCTCCTGCTCCTTGTTTTCCCAG
CAGCACATGGGGTTCCTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTGGGCTGCGGTGCTGCGTCATTT
TTCCTTTGCTTTCTCTTTACTTTAGACACTGGCCCAACTCCAGGCGTTTCTTTTCACTCCCTCAGTGCTTCTCTT
CTGACCTGCATGTTGAGTTCTGTATTGCTGGGGCTTCCAACAAAACCAGAGTCACTGACAGAGGGAACAGCAGA
GACCTTGTTGGTATTAGCTGTGATGGATATAGAGAATCAGAGGCACCTTGTTTTCACTAGGATAAAAAATAT
CTGCAGGGTCCCTTTCCATTCTTATTTAGAGGGAGTCTGGCTCCATGACCCCCCTCCCGAGTGGACTGTCCAAGCA
GATAGGCTCACACGAGAAACAGTGAGGCTGAAAGGGGGGGCTATGGAAGAGCGGTAGGGAGTCCACGGAGAAGAT
GCAGTGAATGCTTGATGCATTACACGTGTGTGTGCCAGCTAGTTCACTCCTTTCCCGTGCGTGGTGGAGG
CTGGCCTCTCTGGCTGGGTGCAGTGAATGGCCAGCGGGTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGA
GGGGGTGGTGTGGTGTGCTGACTGGGCTGACTGCGGCGCTGACGCAGCGTTTCCCCCATCCCTGTTGCCTGTGT
GTTGTGTGGATCTGTTCTAGTATAGGCAACATAATGAGATACTGTGCTTCCACCTCCCTTCAGTTCAGAGCC
AAAATGGGTCTAGAATCTGGCACTTTACTCATTTCCTTTGATAAATTGTACTATGCAGAGCTGTGAGGAACCTTC
AGATAGCAGTAGAGGACTGCAGCTGTCTAGGTCTGCGGCCACATCTTGGGGACACACTGGACTGTTCCCATGTGC
AGGGTTCAGCAGTTATGTGGGAGTGTAGGGGTTAGGCTTTTGAGCTTGAACGCCGTGCGTGTGAACAGATGAAAA
ATCCTTCAGTACCCAAGTCCCAGTCTGTCTATGGGGAGCAGTTTGGGGGCGGCCGCGCAGCAGGAGCCTGGGAAA
GAGGCCCTCGCCAGGTGATGGCAGGGCCAGGTGGCTGGGGCAGCCAGCGGAATGTGCTTAGTATTTGGTCACC
AGCCGTCTATCCTGGGCTTTTCTACTGTGTCTTGTACAAAGCCCTCAGCAATCCACAGAACTCTCTCTCCTTCT
TCCACCTGTGAGCTTCTCTGCTTCTGAGATAAGAACCATTTGTGTAAACACCAACACTTAACCTCAGAAAGACATG
CATTATGTGGTGTAAATCAAACCCGATGCTTTAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACA
AAACACATGCATCTAAACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACAC
ATTAGCTATATGACAGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAGAAAACCTT
ACGTAATATTT

WO 2004/030615

PCT/US2003/028547

2491/6881
FIGURE 2291

MADFDTYDDRAYSSFGGGRGSRGSAGGHGSRSQKELPTEPPYTAYVGNLPEFNTVQGDIDAIFKDLSIRSVRLVRD
KDTDKFKGFCYVEFDEVDSLKEALTYDGALLGDRSLRVDIAEGRKQDKGGFGFRKGGPDDRGFRDDFLGGRGGSR
PGDRRTGPPMGSRFRDGPPLRGSNMDFREPTEEERAQRRLQLKPRTVATPLNQVANPNSAIFGGARPREEVVQK
EQE

WO 2004/030615

PCT/US2003/028547

2492/6881

FIGURE 2292

GGGAAGAGGAGGCGCGAGAATGGAGGTGGAGGCCGTCTGTGGTGGCGCGGGCGAGGTGGAGGCCAGGACTCTGA
CCCTGCCCCTGCCCTTCAGCAAGGCCCGGCGAGCGCCGGCCACTACGAACTGCCGTGGGTGAAAAATATAGGCC
AGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACCGTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGT
GCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGCAAGACCACAAGCATTCTGTGCTTGGCCCCGGGCCCTGCT
GGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAATGCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAA
AATTAATGTTTGTCTAACAAAAAGTCACTCTTCCCAAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGA
CAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGAACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCT
TGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATTCAGTCCCGCTGTGTCAGTCCTCCGGTACACAAAGCTGAC
CGACGCCCAGATCCTCACCAGGCTGATGAATGTTATCGAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGA
AGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAGGCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGG
CTTCATTAACAGTGAGAACGTGTTCAAGGTCTGTGACGAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCA
CTGTGTGAATGCCAACATTGACGAAGCCTACAAGATTCTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGA
TATCATTGGCAACATCTTTCGAGTGTGTAAACTTTCCAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGA
AATTGGATACTCACATGAAAATAGCGGAAGGAGTGAATCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCT
GTGTCAGAAGACAATGGCCCCGGTGGCCAGTTAGAGCAGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTG
AGGTACAGGAGCCCGCGGCTTTCTGATGGGGGAAAATGCCGCCTTAGGCTGGAGCCAACATGACTGTCCTTTAAAC
TCCAGTGGCTGGCCAGGCACGGTAGCTCACGCCTGTAATCCCAACACTTTGGGAGGCCGAGGCAGGTGGATCACC
TGAGGTGAGAAGTTCAAGACCAGCCTGGCCAACATGGGGAAACCCTGTCTTTACTAAAAATATAAAAATTAGCTG
GGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAGGCTGTGGCAGGAGAATCGCTTGAACCCAGGAGGTG
GAGGTTGCAGTGAGCCAAGATCACACCATTGCCTCCAGCCTGGGCGACAGAGTCTCCATCTGGGGAAAAAAATT
AAATAAAATAAACTCCCG

2493/6881
FIGURE 2293

TAAATGGCAGCCAATGGAGGGTGGTGTTCGCGGGGGCTGGGATTAGGGCCGGGGCGAATGGCTGGCAATCTTACT
GGGATTACAGAACAAAGAGCCTCCCCGCGCTCCCGCTCTCCGCTCCTCTCCCCGCGCGCCCCGCCCTCCGCCGC
AGCCCCGCGCGGGGGTGGGGGCCGCCGAGCGCCAGCCCCCGGCCGGCCGATTCCCCCCCCGCGCCCCCTCCCCG
CGCCTCCCTCCCCGCCCTCGCCGCGCGCGCCGTCTCGCCTCCCTCTGCCTCTCCTTCCCCCATTTCTCCGGATTA
ATTAAGGAGGCAGCGGCAGGAGGCTGAGTCCTGGCCGCGGGCCGGGGCCGGGGCGCCGCTGGCAGGAGCGCTTGG
GGATCCTCCAAGGCGACCAATGGCCTTGCTGGGTAAGCGCTGTGACGTCCCCACCAACGGCTGCGGACCCGACCGC
TGGAATCCGCGTTACCCGCAAAGACGAGATCATCACCAGCCTCGTGTCTGCCTTAGACTCCATGTGCTCAGCG
CTGTCCAAACTGAACGCCGAGGTGGCCTGTGTGCGCGTGCACGATGAGAGCGCCTTTGTGGTGGGCACAGAGAAG
GGGAGAATGTTTCTGAATGCCCCGAAGGAGCTACAGTCAGACTTCCTCAGGTTCTGCCGAGGGCCCCGTGGAAG
GATCCGGAGGCAGAGCACCCCAAGAAGGTGCAGCGGGGCGAGGGTGGAGGCCGTAGCCTCCCTCGGTCTCCCTG
GAACATGGCTCAGATGTGTACCTTCTGCGGAAGATGGTAGAGGAGGTGTTTGTATGTTCTTTATAGCGAGGCCCTG
GGAAGGGCCAGTGTGGTGCCACTGCCCTATGAGAGGCTGCTCAGGGAGCCAGGGCTGCTGGCCGTGCAGGGGCTG
CCCGAAGGCCTGGCCTTCCGAAGGCCAGCCGAGTATGACCCCAAGGCCCTCATGGCCATCTGGAACACAGCCAC
CGCATCCGCTTCAAGCTCAAGAGGCCACTTGAGGATGGCGGGCGGGACTCGAAGGCCCTGGTGGAGCTGAACGGT
GTCTCCCTGATTCCCAAGGGGTACGGGACTGTGGCCTGCATGGCCAGGCCCCCAAGGTGCCACCCAGGACCTG
CCCCCAACCGCCACCTCCTCCTCCATGGCCAGCTTCTGTACAGCACGGCGCTCCCCAACACGCCATCCGAGAG
CTCAAGCAGGAAGCACCTTCTGCCCCCTTGCCCCCAGCGACCTGGGCCTGAGTCGGGCCATGCCAGAGCCCAAG
GCCACCGGTGCCCAAGACTTCTCCGACTGTTGTGGACAGAAGCCCACTGGGCCTGGTGGGCCTCTCATCCAGAAC
GTCCATGCCTCCAAGCGCATTCTCTTCTCCATCGTCCATGACAAGTCAGAGAAGTGGGACGCCTTCATAAAGGAA
ACCGAGGACATCAACACGCTCCGGGAGTGTGTGCAGATCCTGTTTAAACAGCAGATATGCGGAAGCCCTGGGCCCTG
GACCACATGGTCCCCGTGCCCTACCGGAAGATTGCCTGTGACCCGGAGGCTGTGGAGATCGTGGGCATCCCGGAC
AAGATCCCCCTTCAAGCGCCCCCTGCACTTATGGAGTCCCCAAGCTGAAGCGGATCCTGGAGGAGGCCATAGTATC
CACTTCATCATTAAAGAGGATGTTTGTATGAGCGAATTTTACAGGGAAACAAGTTTACCAGAACACACGAAGCTG
GAGCCAGCCAGCCCCGCCAGAGGACACCTCTGCAGAGGTCTTAGGGCCACCGTCCTTGACCTTGCTGGGAATGCT
CGGTGAGACAAGGGCAGCATGTCTGAAGACTGTGGGCGAGCAACCTCCGGGGAGCTGGGCGGGCTGAGGCCGATC
AAAATTGAGCCAGAGGATCTGGACATCATTAGGTACCGTCCAGACCCCTCGCCAACCTCTGAGGAAATGACA
GACTCGATGCCTGGGCACCTGCCATCGGAGGATTCTGTTTATGGGATGGAGATGCTGACAGACAAAGGTCTGAGT
GAGGACGCGCGGCCGGAGGAGAGGCCCGTGGAGGACAGCCACGGTGACGTGATCCGGCCCCCTGCGGAAGCAGGTG
GAGCTGCTCTTCAACACACGATACGCCAAGGCCATTGGCATCTCGGAGCCCGTCAAGGTGCCGTACTCCAAGTTT
CTGATGCACCCGGAGGAGCTGTTTGTGGTGGGACTGCCTGAAGGCATCTCCCTCCGAGGCCCAACTGCTTCGGG
ATCGCCAAGCTCCGGAAGATTCTGGAGGCCAGCAACAGCATCCAGTTTGTATCAAGAGGCCCGAGCTGCTCACT
GAGGGAGTCAAAGAGCCCATCATGGATAGTCAAGGAAGTGCCTCCTCACTTGCTTCTCTCCCCCTGCCCTGCCC
CCAGAGAGGGATTCCGGGGACCCCTCTGGTGGACGAGAGCCTGAAGAGACAGGGCTTTCAAGAAAATTATGACGCG
AGGCTCTCACGGATCGACATCGCCAACACACTAAGGGAGCAGGTCCAGGACCTTTTCAATAAGAAATACGGGGAA
GCCTTGGGCATCAAGTACCCGGTCCAGGTCCCCTACAAGCGGATCAAGAGTAACCCCGGCTCCGTGATCATCGAG
GGGCTGCCCCCAGGAATCCCGTTCCGAAAGCCCTGTACCTTCGGCTCCAGAACCTGGAGAGGATTCTTGCTGTG
GCTGACAAGATCAAGTTCACAGTCACCAGGCCTTTTCAAGGACTCATCCCAAAGCCTGATGAAGATGACGCCAAC
AGACTCGGGGAGAAGGTGATCCTGCGGGAGCAGGTGAAGGAACCTTCAACGAGAAATACGGTGAGGCCCTGGGC
CTGAACCGGCCGGTGTGCTGGTCCCTTATAAACTAATCCGGGACAGCCAGACGCGGTGGAGGTACGGGTCTGCCT
GATGACATCCCCCTTCCGGAACCCCCAACACGTACGACATCCACCGCTGGAGAAGATCCTGAAGGCCCGAGAGCAT
GTCCGCATGGTCATCATTAAACCAGCTCCAACCCCTTTGCAGAAATCTGCAATGATGCCAAGGTGCCAGCCAAAGAC
AGCAGCATTCCCAAGCGCAAGAGAAAGCGGGTCTCGGAAGGAAATCCGTCTCCTCTTCTCCTCGTCTTCTCT
TCTCGTCTCTAACC CGGATTCACTGGCATCGGCCAACAGATCTCACTCGTGCAATGGCCAATGTACATGGTG
GACTATGCCGGCCTGAACGTGCAGCTCCCGGGACCTCTTAATTACTAGACCTCAGTACTGAATCAGGACCTCACT
CAGAAAGACTAAAGGAAATGTAATTTATGTACAAAATGTATATTCCGATATGTATCGATGCCTTTTAGTTTTTCC
AATGATTTTTTACACTATATTCTGCCACCAAGGCCTTTTTAAATAAGTAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2494/6881
FIGURE 2294

MALLGKRCDVPTNGCGPDRWNSAFTRKDEIITSLVSALDSMCSALSKLNAEVACVAVHDESAFVVGTEKGRMFLN
ARKELOSDFLRFCRGPPWKDPEAEHPKKVQRGEGGGRSLPRSSLEHGSDVYLLRKMVEEVFDVLYSEALGRASVV
PLPYERLLREPGLLAVQGLPEGLAFRRPAEYDPKALMAILEHSHRIRFKLRPLEDGGGRDSKALVELNGVSLIPK
GSRDCGLHGQAPKVPPQDLPTATSSSMASFLYSTALPNHAIRELKQEAPSCPLAPSDLGLSRPMPEPKATGAQD
FSDCCGQKPTGPGGPLIQNVHASKRILFSIVHDKSEKWDAFIKETEDINTLRECVQILFNSRYAEALGLDHMPV
PYRKIACDPEAVEIVGIPDKIPFKRPCTYGVPKLKRILEERHSIHFIKRMFDERIFTGNKFTKDTTKLEPASPP
EDTSAEVSRA TVLDLAGNARSDKGSMS EDCGPGTSGELGGLRPIKIEPEDLDIIQVTVDPSP TSEEMTDSMPGH
LPSEDSGYGMEMLTDKGLSEDARPEERPVEDSHGDVIRPLRKQVELLFNTRYAKAIGISEPVKVPYSKFLMHPEE
LFVVGLPEGISLRRPNCFGI AKLRKILEASNSIQFVIKRPELLTEGVKEPIMDSQGTASSLGFSPPALPPERDSG
DPLVDESLKRQGFQENYDARLSRIDIAN TLREQVQDLFNKKYGEALGIKYPVQVPYKRIKSNPGSVIIIEGLPPGI
PFRKPCTFGSQNLERILAVADKIKFTVTRPFQGLIPKPEDDANRLGEKVILREQVKELFNEKYGEALGLNRPVL
VPYKLIRDSPDAVEVTGLPDDIPFRNPNTYDIHRLEKILKAREHVRMVIINQLQPF AEICNDAKVP AKDSSIPKR
KRKRVSEGN SVSSSSSSSSSSSSSNPDSVASANQISLVQWPMYMDYAGLNVQLPGPLNY

WO 2004/030615

PCT/US2003/028547

2495/6881
FIGURE 2295A

AGGAGGAGGAGGGTGAGAGAGAAGCTGGGAGAGCAGAGAAAAGGGGGCCACCGGTCGCCCCCGCTTCCCCGCAC
GCGCTCTCCAGCCGCGGCCCGCCCGCTGCCGCGGTACCCCGGCCTCTGCCTCTGTCCCCAGTGATCGGATCAA
GGCGCTGAGCGAGGGCCCTGCCTGCGGGGCGGCCATGCGGCGGTGACAGGAGCGCGACCGACACGCACGGGCCCCCT
CGCCCCCTCTCGCTCCCGTCCGCTCGCCAGCTCCCTCAGCCGAGGCTGCTCCGCGGCGGCCGAGCCCGCGCG
CGGCCACACTCGCCTCCCTCGGCACCCCGGCCCGGAGCTGCCTGGAGGCGGCCGCACTCGGGGATCATGGC
CCAAGTTGCAATGTCCACCCTCCCGTTGAAGATGAGGAGTCTCGGAGAGCAGGATGGTGGTGACATTCTCAT
GTCAGCTCTCGAGTCCATGTGTAAAGAACTGGCCAAGTCCAAAGCCGAAGTGGCTGCATTGCAGTGATGAAAC
AGACGTGTTTGTCTCGTCCGAAGTGAAGAGGACGTGCTTTTGTCAATACCAGAAAGGATTTTCAAAAAGATTTTGT
AAAATATTGTGTTGAAGAAGAAGAAAAAGCTGCAGAGATGCATAAAATGAAATCTACAACCCAGGCAAAATCGGAT
GAGTGTAGATGCTGTAGAAATTGAAACACTCAGAAAAACAGTTGAGGACTATTTCTGCTTTTGCTATGGGAAAGC
TTTAGGCAAAATCCACAGTGGTACCTGTACCATATGAGAAGATGCTGCGAGACCAGTCGGCTGTGGTAGTGACAGG
GCTTCCGGAAGGTGTTGCCTTTAAACACCCCGAGAAGTATGATCTTGCAACCCGAAATGGATTTTGAGAGAACAA
AGCAGGGATTTTATTATCATTAAGAGACCTTTTTTAGAGCCAAAGAAGCATGTAGGTGGTCTGTGTATGGTAAC
AGATGCTGACAGGTCAATACTATCTCCAGGTGGAAGTTGTGGCCCCATCAAAGTGAAACTGAACCCACAGAAGA
TTCTGGCATTTCCTGGAATGGCAGCTGTGACAGTAAAGGAAGAATCAGAAGATCCTGATTATTATCAATATAA
CATTCAAGCAGGCCCTTCTGAACTGATGATGTTGATGAAAAACAGCCCCATCGAAGCCTTTGCAAGGAAGCCA
CCATTCTTCAGAGGGCAATGAAGGCACAGAAATGGAAGTACCAGCAGAAGATTCTACTCAACATGTCCCTTCAGA
AACAAGTGAGGACCCTGAAGTTGAGGTGACTATTGAAGATGATGATTATCTCCACCGTCTAAGAGACCAAAGGC
CAATGAGCTACCGCAGCCACCAGTCCCGGAACCCGCCAATGCTGGGAAGCGGAAAGTGAGGGAGTTCAACTTCGA
GAAATGGAATGCTCGCATCACTGATCTACGTAAACAAGTTGAAGAATTGTTTGAAGGAAATATGCTCAAGCCAT
AAAAGCCAAAGGTCCGGTGACGATCCCGTACCCTCTTTTCCAGTCTCATGTTGAAGATCTTTATGTAGAAGGACT
TCCTGAAGGAATTCTTTTAGAAGGCCATCTACTTACGGAATTCTCGCTGGAGAGGATATTACTTGCAAAGGA
AAGGATTCGTTTTGTGATTAAGAAACATGAGCTTCTGAATTCAACACGTGAAGATTTACAGCTTGATAAGCCAGC
TTCAGGAGTAAAGGAAGAATGGTATGCCAGAATCACTAAATTAAGAAAGATGGTGGATCAGCTTTTCTGCAAAA
ATTTGCGGAAGCCTTGGGGAGCACTGAAGCCAAGGCTGTACCGTACCAGAAATTTGAGGCACACCCGAAATGATCT
GTACGTGGAAGGACTGCCAGAAAACATTCTTTCCGAAGTCCCTCATGGTATGGAATCCCAAGGCTGGAAAAAT
CATTCAAGTGGGCAATCGAATTAATTTGTTATTAAAGACAGAACTTCTGACTCACAGTACCCTGAAGTTAC
TCAGCCAAGAACAATACACAGTCAAGGAATTTGGAATGTGAGAATTACCAAGCTACGGAAGCAAGTGAAGA
GATTTTTAATTTGAAATTTGCTCAAGCTCTTGACTCACCGAGGCAGTAAAAGTACCATATCTGTGTTTGAATC
AAACCCGGAGTTCCTGTATGTGGAAGGCTTGCCAGAGGGGATTCCCTTCCGAAGCCCTACCTGGTTTGGAATTCC
ACGACTTGAAAGGATCGTCCGCGGAGTAATAAAATCAAGTTCGTTGTTAAAAAACCTGAAGTAGTTATTTCTTA
CTTGCTCCTGGGATGGCTAGTAAATAAACACTAAAGCTTTGCAGTCCCCAAAAGACCACGAAGTCTTGGGAG
TAATTCAAAGGTTCTGAAATTGAGGTACCGTGGAAGGCCCTAATAACAACAATCTCAAACCTCAGCTGTTCCG
AACCCCGACCCAGACTAACGGTTCTAACGTTCCCTTCAAGCCACGAGGGAGAGAGTTTTCTTTGAGGCCTGGAA
TGCCAAAATCACGGACCTAAACAGAAAGTTGAAATCTCTTCAATGAGAAATGTGGGGAAGCTCTTGCCCTTAA
ACAAGCTGTGAAGGTGCCGTTTCGCGTTATTTGAGTCTTTCCCGGAAGACTTTTATGTGGAAGGCTTACCTGAGGG
TGTGCCATTCCGAAGACCATCGACTTTTGGCATTCCGAGGCTGGAGAAGATACTCAGAAAACAAAGCCAAAATTA
GTTTCATCATTAAAAAGCCCGAAATGTTTGAGACGGCGATTAAAGGAGAGCACCTCTCTAAGAGCCCTCCAGAAA
AATAAATTCATCACCCAATGTTAATACTACTGCATCAGGTGTTGAAGACCTTAACATCATTAGGTGACAATTCC
AGATGATGATAATGAAAGACTCTCGAAAGTTGAAAAAGCTAGACAGCTAAGAGAACAAGTGAATGACCTCTTTAG
TCGGAAATTTGGTGAAGCTATTGGTATGGGTTTTCTGTGAAAGTTCCCTACAGGAAAATCACAATTAACCCTGG
CTGTGTGGTGGTTGATGGCATGCCCCGGGGGTGCTTCAAAGCCCCAGCTACCTGGAAATCAGCTCCATGAG
AAGGATCTTAGACTCTGCCGAGTTTATCAAATTCACGGTCATTAGACCATTTCAGGACTTGTGATTAATAACCA
GCTGTTGATCAGAGTGAGTCAGAAGGCCCGTGATACAAGAATCAGCTGAACCAAGCCAGTTGGAAGTTCCAGC
CACAGAAGAAATAAAGAGACTGATGGAAGCTCTCAGATCAAGCAAGAACCAGACCCACGTGGTAGACCTCTTC
CCTCCTAGGCTTAAAGTATCAGTGGTTGAGAAGAGCTTTTCGGACCTGTTACTACCCCAAGCTGTGTAATATACT
TGTATAACAGAAATACCTTCTATACAAACCTTTTTTTCTACTTTTAGATAGAAATGTCTACTTTTTTCAGCAGTTC
TGTGAATTAAGAGCAGAGTGACTGTGGTCTGGAATGGCTGGTGTACTTGGGAATGTACTATCAGGATTTTACA

WO 2004/030615

PCT/US2003/028547

2496/6881
FIGURE 2295B

GCAATGCTGGGAAATGACAGGGAAAATGACAGGAATGAATCTCACCAGATTTTTTATGTACTCAGCAGAGCCTTG
AGTTACGGTGTTTTATTTTCCAATCAAGTGAAGATATCTCCTACTTCTCCTACTGGAACATCTCAGCTTCTGCAGT
GAAGAAAAATTCCTGTGATAGTTTCAGTTCTTTAGTTTTTCTATTTGAAAAAAAAAATCATTTAAATGATCCTTT
GTTACGGCTCTCCTTAATGACTGAGTGAACAGTTCCTATCTGTATATTTGACTAAACCTTTTCCTAAGCTATCT
CTCATGGTTTCTATGTTTTTTTTATCATAATTTAAAGCAAACCATCTGGATCACCTAACAGTCAGAGGTCAGTAT
CTCAGCGTGTGAATTATAGAGGAAATACAGAGAGAACCTCTTCCACTTTTACTTTTCGTCCAAATAAAATGCATG
GTGTACCAGAAGTTGAAGATCGGGTTGAGGATTGGGGCTAGCTCGATGACACTAAGGCCCAACATCGCGGGACC
TGCTGTGGCGCGGATTCTTAGGAACGCTGTTCTAGCCGGCCCCCTCTCCAGGGGTCGCGTGGCCGGCATTATTTT
CTAGTTCTTTGTAACCTGAGGTGCCAGCGCGGGGAGTGAGGAGGGTCAGGGGGCTAAGGATGCAACCTCTG
ACGTTCTGCGCCTTCTAGGAGAGTCTTACATGTGTTGAGATTTACAAGCAATGCGAGTTGTAAAATACCAGCT
CTACAAGAAGCTAGGCTCTGTGACGGCATAGTTTTCAGTAGCTTTATCACAATATTACAATGGAGAATTATATG
ACATGGTAGCAGAAATAGGCCCTTTTATGTGTTGCTTCTATTTTACCTCAAATTGTAGATATAGGGTAATCAATA
AAATCCATCCATGCCTTTTACACACTAAAAAGTCGGA

WO 2004/030615

PCT/US2003/028547

2497/6881
FIGURE 2296

MAQVAMSTLPVEDEESSESRMVVTFILMSALESMCKELAKSKAEVACIAVYETDVFVVGTERGRAFVNTRKDFQKD
FVKYCVEEEEKAAEMHKMKSTTQANRMSVDAVEIETLRKTVEDYFCFCYGKALGKSTVVPVPYEKMLRDQSAVVV
QGLPEGVAFKHPENYDLATLKWILENKAGISFIIKRPFLEPKKHVGGVMVTDADRSILSPGGSCGPIKVKTEPT
EDSGISLEMAAVTVKEESEDPDYYQYNIQAGPSETDDVDEKQPLSKPLQGSCHSSEGNEGTEMEVPAEDSTQHVP
SETSEDPEVEVTIEDDDYSPPSKRPKANELQPPVPEPANAGKRKVREFNFEKWNARITDLRKQVEELFERKYAQ
AIKAKGPVTIPYPLFQSHVEDLYVEGLPEGIPFRPSTYGIPRLERILLAKERIRFVIKKHELLNSTREDLQLDK
PASGVKEEWYARITKLKRMVDQLFCKKFAEALGSTEAKAVPYQKFEAHPNDLYVEGLPENIPFRSPSWYGIPRLE
KIIQVGNRIKFVIKRPELLTHSTTEVTQPRNTNPVKEDWNVRITKLKQVEEIFNLKFAQALGLTEAVKVPYPVF
ESNPEFLYVEGLPEGIPFRSPTWFGIPRLERIVRGSNKIKFVVKPELVISYLPPGMAKINTKALQSPKRPRSP
GSNSKVPEIEVTVEGPNNNNPQTSVRTPTQTNGSNVPFKPRGREFSFEAWNAKITDLKQKVENLFNEKCGEALG
LKQAVKVPFALFESFPEDFYVEGLPEGVPFRPSTFGIPRLEKILRNKAKIKFIKKPEMFETAIKESTSSKSP
RKINSSPNVNTTASGVEDLNI IQVTIPDDDNERLSKVEKARQLREQVNDLFSRKFGAIGMGFPVKVPYRKITIN
PGCVVVDGMPPGVSFKAPSYLEISSMRRIILDSAEFIKFTVIRPFPGLVINNLVDQSESEGPVIQESAEPSSQLEV
PATEEIKETDGSSQIKQEPDPTW

WO 2004/030615

PCT/US2003/028547

2498/6881
FIGURE 2297

GCGACTTCCTCTTTCCAGTGCAATTTAAGGCGCAGCCTGGAAGTGCCAGGGAGCACTGGAGGCCACCCAGTCATGG
GGGACACCTTCATCCGTCACATCGCCCTGCTGGGCTTTGAGAAGCGCTTCGTACCCAGCCAGCACTATGTGTACA
TGTTCTTGGTGAAATGGCAGGACCTGTCTGGAGAAGGTGGTCTACCGGCGCTTCACCGAGATCTACGAGTTCCATA
AAACCTTTAAAGAAATGTTCCCTATTGAGGCAGGGGCGATCAATCCAGAGAACAGGATCATCCCCACCTCCAG
CTCCCAAGTGGTTTGACGGGCAGCGGGCCGCCGAGAACC GCCAGGGCACACTTACCGAGTACTGCGGCACGCTCA
TGAGCCTGCCCCACCAAGATCTCCCGCTGTCCCCACCTCCTCGACTTCTTCAAGGTGCGCCCTGATGACCTCAAGC
TCCCCACGGACAACCAGACAAAAAGCCAGAGACATACTTGATGCCCAAAGATGGCAAGAGTACCGCGACAGACA
TCACCGGCCCCATCATCCTGCAGACGTACCGCGCCATTGCCAACTACGAGAAGACCTCGGGCTCCGAGATGGCTC
TGTCCACGGGGGACGTGGTGGAGGTCGTAGAGAAGAGCGAGAGCGGTCAGACCTCCACCTTACGGGGCTCCTTC
CCCTGGTGCTCAGGAACCCACAGCCACAAGCCCCCTGCCAAGGCTCAGGCAGCCTTGCCCCCTGGGAGGACTCCGG
CTCTGTTAGGGGCCCTAAATGTCTCTCCCACTGTGGGTGCGCTTCTGTCTTAGTGTGCACCTGTGGTGGCTG
TGGGCATCTGTGCTTGGCAGGCCGGGGCGGGGCATGTCTGCGTGTCTGTCTGGATGGGTATGGGACCGTCTGTT
CATTATGAAGTGGGCTCAGAGCTGTGATTCTGTGAGCATGTGTGCATGCATGCATGTGACCTCATTGTCCGGTGT
GGTGAAGGTGACATTTCCAAATCTGAGCATTGGACATCAGTGTGTCTGTGTCCCTGTGTCTCACCATCCCTGAT
GGCTGCAGGGAGCCGCTGGGCCCTGCCCCCTCAGTCACATTCCCGCACCTCTGGCACAGGTTGGTGGTTCTGTCTCAG
ATGAAAGCAAAGCGAGGCTGGATCCCAGCGTCCTTCCTCGAGCCCCCTGGACAGTCCTGACGAGACGGAAGACCT
G

WO 2004/030615

PCT/US2003/028547

2499/6881
FIGURE 2298

MGDTFIRHIALLGFEKRFVPSQHYVYMFLVKWQDLSEKVVYRRFTEIYEFHKTLEMFPIEAGAINPENRIIPHL
PAPKWFDGQRAAENRQGTLTEYCSLMSLPTKISRCPHLLDFFKVRPDDLKLPTDNQTKKPETYLMPKD GKSTAT
DITGP IILQTYRAIANYEKTSGSEMALSTGDVVEVVEKSESGQTSHLTGLLPLVLRNPQPQAPCQSGSLAPGRT
PALLGALNVLP TLWVAFCLSVHPVVAVGICAWQAGAGHVCFCLDGYGTVC SL

WO 2004/030615

PCT/US2003/028547

2500/6881
FIGURE 2299A

GAGCCCCAGGGAGGCGGATCTGGGCCCCGAGAAGGACACCCGCCTGGATTGCCCCGTAGGCCCCGGCCCCGGGCCCC
CTCGGGAGCAGAACAGCCTTGGTGAGGTGGACAGGAGGGGACCTCGCGAGCAGACGCGCGGCCAGCGACAGCAG
CCCCCCCCGGCCTCTCGGGAGCCGTGGGGCAGAGGCTGCGGAGCCCCAGGAGGGGGCCAGTGTCAATTCAAAGATG
TGGCTGTGGATTTCACCCAGGAGGAGTGGCGGCAACTGGACCCTGATGAGAAGATAACATACGGGGATGTGATGT
TGGAGAACTACAGCCATCTAGTTTCCCTTGGCTTATGAGGTGGCAACATCTTGTACTTCGGAGATTCTGAAGCCGA
GCAACTTGCCCCAAGTCCTTCTTCTTTTCCCATTAACAAGATATGATATCACCAAGCCAAACGTCATCATTAAAGTT
GGAGCAGGGAGAGGAGCTGTGGATAACGGGAGGTGAATTTCCATGTCAACATAGTCCAGCCCCCTCACATCCTCAG
CCGAAGATCTCACTTCGTCCCAGAGGCCTTTGCTGACTGACCCCTCAGGGATCGTGGGACTTTACCAGATCGGTT
TGTAATAACACCTCGAAGACGCTATCCGATCCATCAGACCCAGTATTCTGTCCGGGGGTACTTCCCACAGTGTG
CTGGAATGGTTATCACAAGAAGGCTGTGCTGTCCCTCGCAACTCCAGGATGGTGTGTAGCCAGTGAAGTGTGAG
GATCGCCCCCTCCTGACAGAAGATTTTACGTTTCTGCGATACCAGAGCAGATAATCAGCTCAACACTGTCTGTCACC
ATCAAGTAATGCCCCAGACCCATGTGCAAAGGAGACTGTACTGAGTGCCCTCAAAGAGAAGAAGAAGAAAAGGAC
AGTGGAGGAAGAAGACCAAAATATTCTTGATGGCCAGGAAAAATAAAGAAGGCGCCATGATAGCAGTGGCAGTGG
ACATTTCAGCATTGAGCCCCCTGGTGGCCAGTGGAGTCCCCGCTTCTTTTGTGCCTAAGCCTGGGTCTCTGAAGAG
AGGCCTCAATTCTCAGAGCTCAGATGACCACTTGAATAAGAGATCCCGAAGCTCTTCCATGAGCTCCTTGACAGG
CGCTTACACAAGTGGCATCCCTAGCTCCAGCCGCAATGCCATTACCAGTTCTTACAGCTCCACTCGAGGCATCTC
ACAGCTCTGGAAGAGAAATGGCCCCAGTTTCATCACCCCTTCTCTAGCCCAGCCTCATCCCGCTCCAGACACCGGA
GAGGCCAGCAAAGAAAATAAGAGAAGAAGAGCTGTGTCACTATTCCAGTTCTTCAACTCCATTGGCAGCAGACAA
GGAGTCCCAGGGAGAAAAGGCTGCAGATACAACCCCAAGGAAGAAACAAAACCTCGAATTCTCAGTCTACACCTGG
CAGCTCTGGGCAGCGTAAGCGGAAAGTTCACTGCTGCCTTCTCGGCGAGGGGAACAGCTGACCTTGCCTCCACC
TCCCCAGCTTGGCTATTTCGATCACTGCCGAGGACCTAGACTTAGAGAAGAAGGCTTCATTACAGTGGTTCAACCA
GGCCTTGAGGACAAAGAGTGATGCTGCCTCGAACTCTGTCACTGAGACCCACCTACCACTCAGCCTTCATTTAC
CTTIACCCTGCCTGCTGCTGCAACTGCCTCCCCACCCACCTCCCTCCTGGCCCCAAGCACCAACCCACTGTTAGA
GAGCTTGAAGAAGATGCAGACTCCCCGAGCCTGCCACCTTGCCAGAATCTGCTGGAGCAGCAACCACTGAGGC
CCTCTCACCTCCAAAGACACCCAGCCTCCTACCCCCGCTGGGTTTATCACAGTCAGGGCCGCCAGGGCTGCTCCC
CAGCCCCCTCCTTTGACTCCAAACCCCCGACCACTTGTCTGGGGCTGATCCCTGCTCCATCCATGGTACCAGCCAC
TGACACCAAGGCACCTCCAACCTTCAAGCAGAGACGGCTACCAACCCCAAGCCACATCTGCCCCGTCCCCCGC
CCCCAAGCAAAGCTTCTGTTTGAACACAGAACACCTCACCTTCCAGCCTGCGGCCCTGCTGCATCTTCAGC
ATCTCCCATGTTCAAGCCATTTTCACGGCTCCACCCAAGAGTGAGAAGGAAGGCCCCACACCGCCTGGCCCTTC
AGTCACAGCCACAGCGCCCTCCAGCTCCTCCCTCCCCACGACCACCAAGCAGCCCGACCTTCCAGCCTGT
CTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCTGCTGCTTCTTCAAGCAGACAACCTACTCCCGCCAC
TGCTCCCAACCAACTGCCCCGCTCTTCACTGGCCTGGCCAGCCACCTCTGCTGTGGCTCCCATCACCTCTGC
CAGTCCATCCACAGACTCTGCTTCGAAGCCTGCGTTTGGCTTTGGCATAAACAGTGTGAGCAGCAGCAGTGTGAG
TACCACGACCAGCAGCGCCACTGCCGCCTCACAGCTTTTCCCTCTTCGGGGCGCCCCAGGCCTCTGCTGCCAGCTT
CACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCCTGCCTTGCCACAACCACCACAGTCACCACCTT
CAGCCAGTCCCTGCCCACTGCCGTGCCAACGGCCACCAGCAGCAGCGCTGCCGACTTTAGTGGTTTTGGCAGCAC
CCTCGCCACCTCCGCCCCGGCCACCAGCAGCCAGCCACTCTGACGTTTCAAGTAACACGAGCACCCCCACGTTCAA
CATTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCGGGAGCCAACCCCCAGCCCGCATTGGGGC
CGCTGAGGGGCAGCCACCGGGGGCCGCCAAGCCAGCCCTTACCCCCAGCTTTGGCAGCTCTTTCACTTTTGGAAA
CTCTGCAGCCCCGGCCCCGGCTACTGCACCCACACCTGCACCTGCGTCCACGATCAAGATCGTGCCTGCGCACGT
GCCTACGCCCATCCAGCCTACCTTTGGCGGTGCCACGCACTCGGCGTTTTGGATTGAAAGCCACGGCTTCCGCCTT
CGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGTCCACTGCTGTCTTCTCCTTCGGTGCAGCCACCAGCTC
CGGCTTTGGAGCCACCACCCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTGTTTGGCAGCACAAACCATCACC
CTTCAGTTTTGGGGTTTGGCAGCCCCCGCTGGCAGTGGGAGCTTTGGGATCAACGTGGCCACCCAGGCTCCAG
CGCCACCACCGGAGCTTTTCACTTTGGAGCAGGACAGAGTGGGAGCACAGCCACCTCCACCCCTTACAGGGGG
CTTAGGTGAGAACGCCCTGGGCACCACCGGCCAGAGCACACCGTTTTGCCTTCAACGTGGGCAGCACAACTGAGAG
CAAACCTGTGTTTTGGAGGCACCGCCACCCCCACCTTTGGTCAAGAACCCCTGCGCCTGGAGTGGGCACATCGGG
CAGCAGCCTCTCCTTTGGGGCATCTTCAGCACCCGCCCAAGGCTTTGTTGGTGTGGACCGTTTCGGCAACACTTT

WO 2004/030615

PCT/US2003/028547

2501/6881
FIGURE 2299B

TGCTCACCAGCAAGAACACAGCCCCGAGGAAGGGACCCCAATAACCTTTCAAATGCAAAGTCTGCTGCGGTGAG
 GGCCCAGGGTCTCTCCACGGAGAGGACAGGCATCTTCCTTTCCACCAGGAAGGAGTCAGCCTGGAGCCTCTGCTA
 TGTGCAAGGCGGTGTGCAAGCACCGGCTGCGGCTCTTTGCTGTCTCTTTCTCTTTGGGGCTGGGCTGGGTGT
 GCGTTCTGGTGCTGATGCTTTGGCCTGTGAGGCTGAGCTAGAGAAGTGTAGATGTTAGATGTGCCAGTACCATCC
 TGCGCCTCCCAAGCATGCCCCACTCACTCACGTCGGCATCTCGACCCGTTCAATTACAGCAACGAAGAAGCCAC
 CGCTAAGCGTGGTCTTGGGGGAAGCCCGGAGGCGAGTGTCTGGGCACCCGGGAACGTGCTCAGGCCTCGGTGGGGCC
 GGGCAGGCAGGGCGGGAGCTAGCCTGCAAGAGAAAACAGCCCCAATGCTGGGTAAGAGAGCAGTTACCCCCATCCC
 CCCCCTCCACGACCTGGCGCCCGCCCTGTACCTGAAGGCGCCCGGGTCTGCTGCAGCGCATCTGGTACCATGT
 CTTCATTCTCCTCCTGGCAGAGGGAGCACATGGAGTAGACGAGCCGCTGCAGGGAAGGGAAAGTGAGCGCGTGGC
 ACAGGGCTCGCTGCTGGAACCTGCCAGGGCATGCAGACGCACCGGGCTAGGTGTCCCTGCCCGGGGATCCTCCA
 GCTGTCTGCTCGGCATACCTAAGGAAAAGCGTGTCTCGGTTACACAGCTTCACAGGCTGCCTCAGTCTGAAATC
 CTCGCTCCTGAAATCCTTGCCCTACAGAGGAGAACTTTTGCTCCAGGGTCCCAAGCCCATTAAAGTGTGAGAACT
 AAGACCAAAACAGATGACTCCAGGTCTAAGCTGTGTGGACCTCCGAGTCCCTCAGCCACGCCTTCTCACCATCT
 CACCCGAGCCACTGCAGGAAGGATCCAGCAGGACATAGTGACCTCACGATAGCGCGGATCTAAGGGGGAGACCG
 CCAGGAAGTCTCCTCAGCCAGCTCACAGCAGGAGACGCCAACCCAGGCCAGCAGCGTGGCCATGGATGCCAGCC
 GCCTGGCATCCAGGTCAAAGGCAAAGATCTTCCTAGGGCAGAGGGCAGAGCAGGGGTGAGCTGAGCATGCACGGA
 GCACTAAGGGCTGTGACAGCTGACACAGACAACCAAGATGCAGGTAAAGCAGGACACACAATATTGAAAC
 GGCTATATTAAAGGGCCAGGGTCAGAGGTAAGTGGCTGGGGTCTCTGCCCCAAGGGCTAAGGGATCCACAT
 CTACACCTGCAGTGGGGAAGCTTAGCTTGGGGCAAATACCGTGAAGTACTTTGGTACAGCAGGAAGAGTTAA
 GCGAAAGTATCTCTTTCAGCCTTTATTACCCACTGAAAGGCACAAAATCAAACCCCATGTCTCCTCCTCCTCCT
 CCTGTGGCACTCACCTTGGTTCTTCAGAAGAGCAGCCAAGTGAAGTGTCTTATTGCCTGGGGCGGCACAGGCAT
 CGATGACATGGGAGCCTGGCGGGGTCCAGCAGCATGGCTGGGAGACAGCTGGCCTGGCAGGCAGAGCACAGGGG
 CCGGGTAAACAGAGACCCAGGCTAGGCCCTTCCCGTGCTACACATCTTCCCTTTTCTATTCTCTTGCTTAC
 CCTGTCTGCAAGATGAGGTGTCCGGCCCGGTACAGTGGGTGTTTATGCAAGTCTGTCTGGGCGGGAAACACAG
 CAGCTCCGGCATCAAGGAGTCCAGGAGAAAATGCTTCCCTTGAGGGCTTGTAAGTCAAGGCTGCCAGGGAA
 GAACCATTCATTCTTCTGAATTTCTCCCTGCCAGGCCCTATTTCAACGGTCCATTATGCAACAAATGTTAC
 CACAGCTATGGAGAAATCAACAGGGTGATAAGGGAATCCGGGATCCGCAGTTGAGGGAATGGGTGTGCAAGCCAG
 ACTGATGGGTGAGGAGCCCCCTCTACTGTTTACCAGCAGTGGGAGCCTGGGCAAGTGATTCAATCTCAAGCCCCA
 CTGGCATCTCTGTAATAATAGTAGGTGTGAGGATTCAATGAGCCAATATATCCAAGATACTTACGTGCCACAATTT
 AATAAATGTTAGCTATTCTGTGAAGCATAACCTTGGAGAAAGGTTACTTTACAGGGGGGTGAGGAGTGGGGAA
 GTGAGAGCTGAGCTCATTCTTGATGGATGAGGAGTTAGTCTATGTGAGGCGCTTAGGTTAAACTACATTCACTAT
 AACTCAGTAAAGCAGTCCCGCCCACTCTCCGACCCATGCAGAAATAGGCCTAGAGAGTCACATGTCTCAGTTTACG
 AAATCTATCGAAGTGGCAGAGCTGGAATTCAAACACAAGCAGCCGTTCTCTGCTATTCCACCCTGGTGTCCAAGC
 AACATGGTAGGGCAGAAGGAAGAGGATCTTACAAAGAGTAAGGGAAAGGGAGAGGGGCAGAGGCTGCTTCTCAGA
 GCCACCAAGGACAAAATAAGACAGGTGTGAGCCAGTGGAGGAGGCACGGGGCAGAGACCAGCCACTGTTGCTG
 GCACGCTGGTGCACGTAGCACTGTGGCAGATGGACCTGGAGAGGAAGCAGGAGGGACAGCAATGGAGCCAAGA
 AAGGACTTAGCATGGCCGGGCGCGGTGGTTTATGCCTGTAATCCCAGCATTTTGGGAGGCCAAGGTGGGCAGATC
 ACCTGAGGTGAGGAGTTTGGAGACCAGCCTGGCCAACATGGAGAAATCCCGTCTCTACTAAAAATACAAAATTAGC
 CAGGCATGGTGTGCTGATGCCTGCAATCCTGTAGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTGTGTAGA
 AAGGGAAGACATAAGAAATTCATTTTGACCTGTACCTTGAACAATTGGTTGGCTGAGATGCTGTTAATTTGTGA
 CTTTGGCCCAATTTGAGCTCACAAAACATGTGTTGTATGGAATCAAGGTTTAAAGGATCTAGGGCTGTGCAGG
 ACATGCCTTGTTAATAAAACGTTTACAAGC

WO 2004/030615

PCT/US2003/028547

2502/6881
FIGURE 2300A

CAGCATCAATAAGGCCATTAATACGCAGGAAGTGGCTGTAAAGGAAAAACACGCCAGAACGTGCATACTGGGCAC
 CCACCATGAGAAAGGGGCACAGACCTTCTGGTCTGTTGTCAACCGCCTGCCTCTGTCTAGCAACGCAGTGTCTGT
 CTGGAAGTTCTGCCATGTGTTCCACAACTCCTCCGAGATGGACACCCGAACGTCTCTGAAGGACTCTCTGAGATA
 CAGAAATGAATTGAGTGACATGAGCAGGATGTGGGGCCACCTGAGCGAGGGGTATGGCCAGCTGTGCAGCATCTA
 CCTGAAACTGCTAAGAACCAAGATGGAGTACCACACCAAAAAATCCCAGGTTCCCAGGCAACCTGCAGATGAGTGA
 CCGCCAGCTGGACGAGGCTGGAGAAAGTGACGTGAACAACTTTTTCCAGTTAACAGTGGAGATGTTTGACTACCT
 GGAGTGTGAACCTCAACCTCTTCCAAACAGTATTCAACTCCCTGGACATGTCCCGCTCTGTGTCCGTGACGGCAGC
 AGGGCAGTGGCGCCTCGCCCCGCTGATCCAGGTCATCTTGGACTGCAGCCACCTTTATGACTACACTGTCAAGCT
 TCTCTTCAAACCTCCACTCCTGCCTCCCAGCTGACACCTGCAAGGCCACCGGGACCGCTTCATGGAGCAGTTTAC
 AAAGTTGAAAGATCTGTTCTACCGCTCCAGCAACCTGCAGTACTTCAAGCGGCTCATTGAGATCCCCCAGCTGCC
 TGAGAACCCACCCAACCTTCCCTGCGAGCCTCAGCCCTGTGAGAACATATCAGCCCTGTGGTGGTGATCCCTGCAGA
 GGCTCATCCCCGACAGCGAGCCAGTCTTAGAGAAGGATGACCTCATGGACATGGATGCCTCTCAGCAGAATTT
 ATTTGACAACAAGTTTGATGACATCTTTGGCAGTTTATTGAGCAGTGATCCCTTCAATTTCAACAGTCAAAATGG
 TGTGAACAAGGATGAGAAGGACCACTTAATTGAGCGACTATACAGAGAGATCAGTGGATTGAAGGCACAGCTAGA
 AAACATGAAGACTGAGAGCCAGCGGGTTGTGCTGCAGCTGAAGGGCCACGTCAGCGAGCTGGAAGCAGATCTGGC
 CGAGCAGCAGCACCTGCGGCAGCAGGCGGGCCGACGACTGTGAATTCCTGCGGGCAGAACTGGACGAGCTCAGGAG
 GCAGCGGGAGGACACCGAGAAGGCTCAGCGGAGCCTGTCTGAGATAGAAAAGGAAAGCTCAAGCCAATGAACAGCG
 ATATAGCAAGCTAAAGGAGAAGTACAGCGAGCTGGTTTCAAGAACAGCTGACCTGCTGCGGAAGAATGCAGAGGT
 GACCAACAGGTGTCCATGGCCAGACAAGCCAGGTAGATTTGGAACGAGAGAAAAAGAGCTGGAGGATTTCGTT
 GGAGCGCATCAGTGACCAGGGCCAGCGGAAGACTCAAGAACAGCTGGAAGTTCTAGAGAGCTTGAAGCAGGAACCT
 TGCCACAAGCCAACGGGAGCTTCAGGTTCTGCAAGGCAGCCTGGAACTTCTGCCCAGTCAGAAGCAAACCTGGGC
 AGCCGAGTTTCGCCGAGCTAGAGAAGGAGCGGGACAGCCTGGTGAGTGGCGCAGCTCATAGGGAGGAGGAATATC
 TGCTCTTCGGAAGAAGTGCAGGACACTCAGCTCAAACCTGGCCAGCACAGAGGAATCTATGTGCCAGCTTGCCAA
 AGACCAACGAAAAATGCTTCTGGTGGGTCCAGGAAGGCTGCGGAGCAGGTGATACAAGACGCCCTGAACAGCT
 TGAAGAACCTCCTCTCATCAGCTGCGCTGGGTCTGCAGATCACCTCCTCTCCACGGTCACATCCATTTCCAGCTG
 CATCGAGCAACTGGAGAAAAGCTGGAGCCAGTATCTGGCCTGCCAGAAAGACATCAGTGGACTTCTCCATTCCAT
 AACCCTGCTGGCCCACTTGACCAGCGACGCCATTGCTCATGGTGCCACCACTGCCTCAGAGCCCCACCTGAGCC
 TGCCGACTCACTGACCGAGGCTGTAGCAGATATGGCAGGAAACCTCGCCTACCTGGCCTCCCTGGAGGAAGA
 GGGAAGCCTTGAGAATGCCGACAGCACAGCCTAGGGAAGTGCCTGAGCAAGATCAAGGCCATCGGCGAGGAGCT
 CCTGCCAGGGGACTGGACATCAAGCAGGAGGAGCTGGGGGACCTGGTGAGCAAGGAGATGGCGGCCACTTCAGC
 TGCTATTGAAACTGCCACGGCCAGAATAGAGGAGATGCTCAGCAAAATCCCGAGCAGGAGACACAGGAGTCAAATT
 GGAGGTGAATGAAAGGATCCTTGGTTGCTGTACAGCCTCATGCAAGCTATTAGGTGCTCATCGTGGCCTCTAA
 GGACCTCCAGAGAGAGATTGTGGAGAGCGGCAGGGGTACAGCATCCCCATAAGAGTTTTATGCCAAGAAGCTCTCG
 ATGGACAGAAGGACTTATCTCAGCCTCCAAGGCTGTGGGCTGGGGAGCCACTGTCTATGGTGGATGCAGCTGATCT
 GGTGGTACAAGGCAGAGGGAATTTGAGGAGCTAATGGTGTGTTCTCATGAAATTGCTGCTAGCACAGCCAGCT
 TGTGGCTGCATCCAAGGTGAAAGCTGATAAGGACAGCCCCAACCTAGCCCAGCTGCAGCAGGCCTCTCGGGGAGT
 GAACCAGGCCACTGCCGGCGTTGTGGCCTCAACCATTTCCGGCAAAATCACAGATCGAAGAGACAGACAACATGGA
 CTTCTCAAGCATGACGCTGACACAGATCAAACGCCAAGAGATGGATTCTCAGGTTAGGGTGCTAGAGCTAGAAAA
 TGAATTGCAGAAGGAGCGTCAAAAACCTGGGAGAGCTTCGGAAGGAGCACTACGAGCTTGCTGGTGTGCTGAGGG
 CTGGGAAGAAGGAACAGAGGCATCTCCACCTACACTGCAAGAAGTGGTAACCGAAAAAGAAATAGAGCCAAACCAA
 CACCCCATATGTGAGTGTAAATCCTTGTACCTATCTCGTGTGTGTTATTTCCCCAGCCACAGGCCAAATCCTTG
 GAGTCCCAGGGGCAGCCACACCCTGCCATTACCCAGTGCCGAGGACATGCATGACACTTCCAAAGACTCCCTCC
 ATAGCGACACCCCTTTCTGTTTGGACCCATGGTCTCTCTGTTCTTTTCCCGCCTCCCTAGTTAGCATCCAGGCTG
 GCCAGTGCTGCCCATGAGCAAGCCTAGGTACGAAGAGGGGTGGTGGGGGGCAGGGCCACTCAACAGAGAGGACCA
 ACATCCAGTCTGCTGACTATTTGACCCCCACAACATGGGTATCCTTAATAGAGGAGCTGCTTGTGTTTGTG
 ACAGCTTGGAAAGGGAAGATCTTATGCCTTTTCTTTTCTGTTTCTTCTCAGTCTTTTCAAGTTTCATATTGCA
 CAACTTGTGAGCATCAGAGGGCTGATGGATTCCAAACCAGGACACTACCCTGAGATCTGCACAGTCAAGGAC
 GGCAGGAGTGTCTGGCTGTGAATGCCAAAGCCATTCTCCCCCTCTTTGGGCAGTGCCATGGATTTCCTACTGCTT

WO 2004/030615

PCT/US2003/028547

2503/6881

FIGURE 2300B

CTTATGGTGGTTGGTTGGGTTTTTTGGTTTTGTTTTTTTTTTTAAAGTTTCACTCACATAGCCAACCTCTCCCAAAG
GGCACACCCCTGGGGCTGAGTCTCCAGGGCCCCCAACTGTGGTAGCTCCAGCGATGGTGCTGCCCAGGCCTCTC
GGTGCTCCATCTCCGCCTCCACACTGACCAAGTGCTGGCCACCCAGTCCATGCTCCAGGGTCAGGCGGAGCTGC
TGAGTGACAGCTTTCTCAAAAAGCAGAAGGAGAGTGAGTGCCTTTCCCTCCTAAAGCTGAATCCCGGCGGAAAG
CCTCTGTCCGCCTTTACAAGGGAGAAGACAACAGAAAGAGGGACAAGAGGGTTACACAGCCCAGTTCCCGTGAC
GAGGCTCAAAAACCTTGATCACATGCTTGAATGGAGCTGGTGAGATCAACAACACTACTTCCCTGCCGGAATGAAC
TGTCCGTGAATGGTCTCTGTCAAGCGGGCCGCTCTCCCTTGGCCCAGAGACGGAGTGTGGGAGTGATTCCCAACTC
CTTTCTGCAGACGTCTGCCTTGGCATCCTCTTGAATAGGAAGATCGTTCCACCTTCTACGCAATTGACAAACCCG
GAAGATCAGATGCAATTGCTCCCATCAGGGAAGAACCCTATACTTGGTTTTGCTACCCCTTAGTATTTATTACTAAC
CTCCCTTAAGCAGCAACAGCCTACAAAGAGATGCTTGGAGCAATCAGAACTTCAGGTGTGACTCTAGCAAGGCTC
ATCTTTCTGCCCGGCTACATCAGCCTTCAAGAATCAGAAGAAAGGCCAAGGTGCTGGACTGTTACTGACTTGGAT
CCCAAAGCAAGGAGATCAATTGGAGCTCTTGGGTGAGAGAAAATGAGAAAGGACAGAGCCAGCGGCTCCAACTCC
TTTCAGCCACATGCCCCAGGCTCTCGCTGCCCTGTGGACAGGATGAGGACAGAGGGCACATGAACAGCTTGCCAG
GGATGGGCAGCCCAACAGCACTTTTCTCTTCTAGATGGACCCCAGCATTTAAGTGACCTTCTGATCTTGAAAA
ACAGCGTCTTCTTCTTTATCTATAGCAACTCATTGGTGGTAGCCATCAAGCACTTCCCAGGATCTGCTCCAACA
GAATATTGCTAGGTTTTGCTACATGACGGGTGTGTGAGACTTCTGTTTGATCACTGTGAACCAACCCCCATCTCCC
TAGCCCCACCCCTCCCAACTCCCTCTCTGTGCATTTTCTAAGTGGGACATTCAAAAAACTCTCTCCCAGGACC
TCGGATGACCATACTCAGACGTGTGACCTCCATACTGGGCTAAGGAAGTATCAGCACTAGAAATTGGGCAGTCTT
AATGTTGAATGCTGCTTTCTGCTTAGTATTTTTTTGATTCAAGGCTCAGAAGGAATGGTGCGTGGCTTCCCTGTC
CCAGTTGTGGCAACTAAACCAATCGGTGTGTCTTGATGCGGGTCAACATTTCCAAAAGTGGCTAGTCTCTCACTT
CTAGATCTCAGCCATTCTAACTCATATGTTCCCAATTACCAAGGGGTGGCCGGGCACAGTGGCTCACGCCTGTAA
TCCCAGCACTTTGAGAGGCTGAGGTGGTAGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTGTCCAACATGGT
GAAACCCCCATCTCTACTAAAAATACAAAAATTAGCCGAGCGTAGTGACGGGTGCCGTAAATCCCAGCTACTCA
GGAGGCTGAGACAGGAGAATCACCTGAACCCAGAGGCAGAGGTTGCAGTGAGCTGAGATCACGCCATTGTACTC
CAGCCTGGGCAACAAGAGCAAACTCCGTCTCAAAAAAAAAAAAAAAAAATTACAAATGGGGCAACAGCTAGTGTA
ATGGATCAAAATTAAGATTCTCTGCCAGCCGGGCACAGTGGCGCATGCCTGTAATCCCAGAACTTTGGGAGGCCA
AGACGGGATGATTGCTTGAGCTCAGGAGTTTGAGACCAGGCTGGGCATCATAGCAAGACCTCATCTCTACTAAAA
TTCAAAAACAAAATTAGCCGGGCATGATGGTGCATGCCTGTAGTCTCAGCTAGTTGGGGAGCTAAGGTGGGAGAA
TTGCTTGAGCTTGGAAGTCGAGGCTGCAGTCAGCCCTGATTGTGCCAGTGCACCTCCGGCCTGGGTGACAGAGTG
AGACCCTGTCTCAAAAAAAAAAAGATTCTGTGTGAGAGCCAGCCAGCCAGGAGTTTGAGGCTGCAATGAGCCATGAT
TTCCCACTGCACTCCAGCCTGAGTGACAGAGCGAGACTCCATCTCTTTAAAAACAAACAAAAAATTATCTGAATG
ATCCTGTCTCTAAAAAGAAGCCACAGAAATGTTTAAAAACTTCATCGACTTAGCCTGAGTCATAACGGTTAAGAA
AGCACTTAAACAGAAGCAGAGGCTAATTCAGTGTACATGAGGAAGTAGCTGTGAGATGTACATAATTACTTTC
GTAATAGCTCAGATTAGAATGGCTACCCCACTCTCTAGACAAAATCAAATTGTCTATTGTGACTCTTCTAAAAA
TGAAGATGAAGAGCTATTTAATGACACACCTTGGATTAAACGGGAATCACATCTTAAAGCTAAAAATGAACCTG
CAAGCCTTCTAAATGAGTCACTGAGCATCACTAGTGACAAGTCTCGGGTGAGCGTAAATGGGTGATGACAAGATG
GGACAGCAACAAAAATCATGGCTTAGGATCGACAAGAAGTTAAAAAACAGCTGCATCTGTTACTTAAAGTTTGTAAAG
ACAGTGCCCTGAGACCTCTAGAGAAAAAGATGTTTGTTTACATAAGAGAAAGAGGCCAGACATGGTGTCTCACACG
TTTAATCCCAGCACTTTGGGAGGCAGGGGCGGGTGGATCACCTGAGGTGAGGAGTTCAAGACTAGCCTGGCCAAC
ATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCAGGCGCCTATAATCCCAGCTAC
TGGGGAGGCTGAGGCAGGAGAATC

WO 2004/030615

PCT/US2003/028547

2504/6881
FIGURE 2301

ATGGGGCGGGGCTCTGGGAGGCGTGCCCTCCGGCCGGCTCCTCTGCTGTTGCCAAGGGAAACTGCCGCGAGGAG
GCGGAAGGAGCAGAGGACCGGCAGCCGGCGTCGAGGCGGGGCGCGGGAACGACGGCGGCCATGGCGGCCTCGGGG
CCCGGGTGTCGCAGCTGGTGCTTGTGTCCCGAGGTGCCATCCGCCACCTTCTTCACTGCGCTGCTCTCGCTGCTG
GTTTCCGGGCTCGCCTGTTCTGTGCTGCAGCAGCCCCCTGGCGCCCTCGGGCCTCACGCTGAAGTCCGAGGCCCTT
CGCAACTGGCAAGTTTACAGGCTGGTAACCTACATCTTTGTCTACGAGAATCCCATCTCCCTGCTCTGCGGCGCT
ATCATCATCTGGCGCTTTGCTGGCAATTTTCGAGAGAACCGTGGGCACCCTCCGCCACTGCTTCTTACCCTGATC
TTCGCCATCTTCTCCGCTATCATCTTCTGTTCATTTCGAGGCTGTGTTCATCACTGTCAAAGCTGGGGGAAGTGGAG
GATGCCAGAGGTTTACCCCCAGTGGCCCTTTGCCATGCTGGGAGTCAACCACCGTCCGTTCTCGGATGAGGCGGGCC
CTGGTGTTTGGCATGGTTGTGCCCTCAGTCCCTGGTTCCGTGGCTCCTGCTGGGTGCCTCGTGGCTCATTCCCCAG
ACCTCTTTCCTCAGTAATGTCTGCGGGCTGTCCATCGGGCTGGCCTATGGCCTCACCTACTGCTATTCCATCGAC
CTCTCAGAGCGAGTGGCACTGAAGCTCGATCAGACCTTCCCCCTTCAGCCTGATGAGGAGGATATCCGTGTTCAAG
TACGTCTCAGGGTCTTCAGCCGAGAGGAGGGCAGCCCAGAGCCGGAACCTGAACCCGGTGCCTGGCTCCTACCCC
ACACAGAGCTGCCACCCCTCACCTGTCCCCAAGCCACCCTGTGTCCCAGACGCAGCACGCCAGTGGTCAGAAGCTG
GCCTCCTGGCCCTCCTGCACCCCCGGGCACATGCCACCTTGCCCTCCGTACCAGCCTGCCTCCGGCCTGTGCTAT
GTGCAGAACCCTTTGGTCCAAACCCACCTCCTCCAGTGTCTACCCAGCTTCTGCGGGCACCTCCCTGGGCATC
CAGCCCCCAGCCTGTGAACAGCCCTGGCACGGTGTATTCTGGGGCCTTGGGCACACCAGGGGCTGCAGGCTCC
AAGGAGTCTCCAGGGTCCCCATGCCCTGAGAGAATTTCTAGGGAAGTCATCTCACTTGGCCTTCTGAAGGTCTCT
CCCTAAGAGTCTCCTGACAAAAGTTACTTATTGA

WO 2004/030615

PCT/US2003/028547

2505/6881
FIGURE 2302

GTTTCATGATCAACATGGGAGACTCCCACGTGGACACCAGCTCCACCGTGTCCGAGGCGGTGGCCGAAGAAGTAT
 CTCTTTTCAGCATGACGGACATGATTCTGTTTTCGCTCATCGTGGGTCTCCTAACCTACTGGTTCTCTTCAGAA
 AGAAAAAAGAAGAAGTCCCCGAGTTCACCAAAATTCAGACATTGACCTCCTCTGTCTAGAGAGAGCAGCTTTGTGG
 AAAAGATGAAGAAAACGGGGAGGAACATCATCGTGTCTACGGCTCCCAGACGGGGACTGCAGAGGAGTTTGCCA
 ACCGCCCTGTCCAAGGACGCCCACCGCTACGGGATGCGAGGCATGTCTAGCGGACCCTGAGGAGTATGACCTGGCCG
 ACCTGAGCAGCCTGCCAGAGATCGACAACGCCCTGGTGGTTTTCTGCATGGCCACCTACGGTGAGGGAGACCCCA
 CCGACAATGCCCAGGACTTCTACGACTGGCTGCAGGAGACAGACGTGGATCTCTCTGGGGTCAAGTTTCGCGGTGT
 TTGGTCTTGGGAACAAGACCTACGAGCACTTCAATGCCATGGGCAAGTACGTGGACAAGCGGCTGGAGCAGCTCG
 GCGCCAGCGCATCTTTGAGCTGGGGTTGGGCGACGACGATGGGAACTTGGAGGAGGACTTCATCACCTGGCGAG
 AGCAGTTCTGGCCGGCCGTGTGTGAACACTTTGGGGTGGAAAGCCACTGGCGAGGAGTCCAGCATTGCCAGTACG
 AGCTTGTGGTCCACACCGACATAGATGCGGCCAAGGTGTACATGGGGGAGATGGGCCGGCTGAAGAGCTACGAGA
 ACCAGAAGCCCCCTTTGATGCCAAGAATCCGTTCTTGCTGCAGTCAACCAACCGGAAGCTGAACCAGGGAA
 CCGAGCGCCACCTCATGCACCTGGAATTGGACATCTCGGACTCCAAAATCAGGTATGAATCTGGGGACCACGTGG
 CTGTGTACCCAGCCAACGACTCTGCTCTCGTCAACCAGCTGGGCAAAATCCTGGGTGCCGACCTGGACGTCTGTA
 TGTCCCTGAACAACCTGGATGAGGAGTCCAACAAGAAGCACCCATTCCCGTGCCCTACGTCTACCGCACGGCCC
 TCACCTACTACCTGGACATCACCAACCCGCCGCGTACCAACGTGCTGTACGAGCTGGCGCAGTACGCCTCGGAGC
 CCTCGGAGCAGGAGCTGCTGCGCAAGATGGCCTCCTCCTCCGGCGAGGGCAAGGAGCTGTACCTGAGCTGGGTGG
 TGGAGGCCCGGAGGCACATCCTGGCCATCCTGCAGGACTGCCCGTCCCTGCGGCCCCCATCGACCACTGTGTG
 AGCTGCTGCCGCGCCTGCAGGCCCCGCTACTACTCCATCGCCTCATCCTCCAAGGTCCACCCCAACTCTGTGCACA
 TCTGTGCGGTGGTTGTGGAGTACGAGACCAAGGCTGGCCGCATCAACAAGGGCGTGGCCACCAACTGGCTGCGGG
 CCAAGGAGCCTGCCGGGGAGAACGGCGGCCGTGCGTGGTGCCCATGTTCTGCGCAAGTCCAGTTCCGCGCTGC
 CCTTCAAGGCCACCACGCCTGTCTCATGTTGGGGCCCCGGCACCGGGGTGGCACCCCTTCATAGGCTTCATCCAGG
 AGCGGGCCTGGCTGCGACAGCAGGGCAAGGAGGTGGGGGAGACGCTGCTGTACTACGGCTGCCGCCGCTCGGATG
 AGGACTACCTGTACCGGGAGGAGCTGGCGCAGTTCCACAGGGACGGTGCGCTACCCAGCTCAACGTGGCCTTCT
 CCCGGGAGCAGTCCCACAAGGTCTACGTCCAGCACCTGCTAAAGCAAGACCGAGAGCACCTGTGGAAGTTGATCG
 AAGGCGGTGCCCACATCTACGTCTGTGGGGATGCACGGAACATGGCCAGGGATGTGCAGAACACCTTCTACGACA
 TCGTGGCTGAGCTCGGGGCCATGGAGCACGCGCAGGCGGTGGACTACATCAAGAACTGATGACCAAGGGCCGCT
 ACTCCCTGGACGTGTGGAGCTAGGGGCTGCGTGCCTGCCCCACCCACCCACAGACTCCGGCCTGTAATCAGCTCTCC
 TGGCTCCCTCCCGTAGTCTCCTGGGTGTGTTTGGCTTGGCCTTGGCATGGGCGCAGGCCCACTGACAAAGACTCC
 TCTGGGCTGGGGTGTCATCCTCCTCAGCCCCAGGCCAGGTGAGGTCCACCGGCCCTGGCAGCACAGCCAGGG
 CCTGTCATGGGGGCACCGGGCTCCATGCCTCTGGAGGCCTTGGCCCTCGGTGGCTGCACAGAAGGGCTCTTTCTC
 TCTGCTGAGCTGGGCCAGCCCTCCACGTGATTTCCAGTGAGTGTAATAATTTTAAATAACCTCTGGCCCTTG
 GAATAAAGTTCTGTTTTCTGT

WO 2004/030615

PCT/US2003/028547

2506/6881

FIGURE 2303

MTDMILFSLIVGLLLTYWFLFRKKKEEVPEFTKIQTLTSSVRESSFVEKMKKKTGRNIIVFYGSQTGTAEEFANRLS
KDAHRYGMRGMSADPEEYDLADLSSLPEIDNALVVFCMATYGECDPTDNAQDFYDWLQETDVDLSGVKFVAVFGLG
NKTYEHFNAMGKYVDKRLEQLGAQRIFELGLGDDDGNNLEEDFITWREQFWPAVCEHFGVEATGEESSIRQYELVV
HTDIDAAKVYMGEMGRLKSYENQKPPFDAKNPFLAAVTTNRKLNQGTERHLMHLELDISDSKIRYESGDHVAVYP
ANDSALVNQLGKILGADLDVMSLNNLDEESNKKHFFCPTSYRTALTYLDITNPPRTNVLYELAQYASEPSEQ
ELLRKMASSSGEGKELYLSWVVEARRHILAILQDCPSLRPPIDHLCCELLPRLQARYYSIASSSKVHPNSVHICAV
VVEYETKAGRINKGVATNWLRAKEPAGENGGRALVPMFVRKSQFRLPFFKATTPVIMVGP GTGVAPFIGFIQERAW
LRQQGKEVGETLLYYGCRRSDEDYLYREELAQFHRDGALTQLNVAFSREQSHKVYVQHLLKQDREHLWKLI EGGA
HIYVCGDARNMARDVQNTFYDIVAELGAMEHAQAVDYIKKLMTKGRYSLDVWS

WO 2004/030615

PCT/US2003/028547

2507/6881

FIGURE 2304

GAGGAGCCTCGGGTGGGCCGGGGTTGCTGCGCCGTCCTCCACTACTGGCTACTGGCGCTGCAGCCATGCAGCCCC
CGCCCCCGGGCCCGCTGGGCGACTGCCTGCGGGACTGGGAGGATCTACAGCAGGACTTCCAGAACATCCAGGAGA
CCCATCGGCTCTACCGCCTGAAGCTGGAGGAGCTGACCAAACCTTCAGAACAAATTGCACCAGCTCCATCACGCGGC
AGAAGAAGCGGCTCCAGGAGCTGGCCCTCGCCCTGAAGAAATGCAAACCCCTCCCTCCCAGCAGAGGCCGAGGGGG
CCGCACAGGAGCTGGAGAACCAGATGAAAGAGCGCCAAGGCCTCTTCTTTGACATGGAGGCCTATTTGCCTAAGA
AGAATGGATTGTACCTGAGCCTGGTTCTGGGGAACGTCAACGTACAGCTCCTGAGCAAGCAGGCTAAGTTTGCT
ACAAGGACGAGTATGAGAAGTTCAAGCTCTACCTCACCATCATCCTCATCCTCATCTCCTTCACTTGCCGCTTCC
TGCTCAACTCCAGGGTGACAGATGCTGCCTTCAACTTCCTGCTGGTCTGGTACTACTGCACCCTGACCATCCGGG
AGAGCATCCTCATCAACAACGGCTCCCGGATCAAAGGCTGGTGGGTGTTCCATCACTACGTGTCCACCTTCCTGT
CGGGAGTCATGCTGACGTGGCCCCGACGGTCTCATGTACCAGAAATTCCGGAACCAATTCTCTCCTTTTCCATGT
ACCAGAGCTTCGTGCAGTTTCTCCAGTACTACTACCAGAGCGGCTGCCTCTACCGCCTGCGGGCGCTGGGCGAGC
GGCACACCATGGACCTCACTGTGGAGGGCTTCCAGTCCTGGATGTGGCGGGGCTCACCTTCCTGCTGCCTTTTC
TTTTCTTTGGACACTTCTGGCAGCTTTTTAACGCGCTGACGTTGTTCAACCTGGCCCAGGACCTCAGTGCAAGG
AGTGGCAGGTGCTTATGTGCGGCTTTCCCTTCCTCCTCTTTTCCTCGGCAATTTCTTACCACCCTGAGGGTTG
TGCACCACAAGTTTCACAGTCAGCGGCACGGGAGCAAGAAGGATTGAGGCTGGGCCTTCCCCTGCCGGCCCAGAG
GGGCTTCTGTCTGTGTGTGTGTGGGAGGGGATGGGAGGCGCCCTCGAGTGTGCGTGTATCAGGGGGTCTCTTCT
ATTCTCCCTTGGGTTTTATGGGCGCTGTGGGCCCTGAAGGAAGACCTGGGCCCAGTGCCCTCAATAAAGAGAGGC
CCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2508/6881
FIGURE 2305

MQPPPPGPLGDCLRDWEDLQQDFQNIQETHRLYRLKLEELTKLQNNCTSSITRQKKRLQELALALKKCKPSLP
AEGAAQELLENQMKERQGLFFDMEAYLPKKNGLYLSVLGNVNVTLSSKQAKFAYKDEYEKFKLYLTIILILISFT
CRFLLNSRVTDAAFNFLVWYYCTLTIRE SILINNGSRIKGWWVFHHYVSTFLSGVMLTWPDGLMYQKFRNQFLS
FSMYQSFVQFLQYYYQSGCLYRLRALGERHTMDLTVEGFQSWMWRLTFLLPFLFFGHFWQLFNALTFLNLAQDP
QCKEWQVLMCGFPFLLLLFLGNFFTTLRVVHKKFHSQRHGSKKD

WO 2004/030615

PCT/US2003/028547

2509/6881
FIGURE 2306

GGCGCTGGGCAGTGTGGAGGTCGTTGGAGTCACTTCCGCGTCACCAGCTCCTGTGCCTGCCAGTCGGTGCCCCCTC
CCGCTCCAGCCATGCTCTCCGCCCTCGCCCGGCTGCCAGCGCTGCTCTCCGCCGCAGCTTCAGCACCTCGGCCC
AGAACAATGCTAAAGTAGCTGTGCTAGGGGCCCTCTGGAGGCATCGGGCAGCCACTTTCACTTCTCCTGAAGAACA
GCCCCTTGGTGAGCCGCCTGACCCTCTATGATATCGCGCACACACCCGGAGTGGCCGCAGATCTGAGCCACATCG
AGACCAAAGCCGCTGTGAAAGGCTACCTCGGACCTGAACAGCTGCCTGACTGCCTGAAAGGTTGTGATGTGGTAG
TTATTCCGGCTGGAGTCCCCAGAAAGCCAGGCATGACCCGGGACGACCTGTTCAACACCAATGCCACGATTGTGG
CCACCCTGACCCTGCCTGTGCCAGCACTGCCCGGAAGCCATGATCTGCGTCATTGCAATCCGGTTAATTCCA
CCATCCCCATCACAGCAGAAGTTTTCAAGAAGCATGGAGTGTACAACCCCAACAAAATCTTCGGCGTGACGACCC
TGGACATCGTCAGAGCCAACACCTTTGTTGCAGAGCTGAAGGGTTTGGATCCAGCTCGAGTCAACGTCCCTGTCA
TTGGTGGCCATGCTGGGAAGACCATCATCCCCCTGATCTCTCAGTGCACCCCAAGGTGGACTTTCCCCAGGACC
AGCTGACAGCACTCACTGGGCGGATCCAGGAGGCCGGCACGGAGGTGGTCAAGGCTAAAGCCGGAGCAGGCTCTG
CCACCCTCTCCATGGCGTATGCCGGCGCCCGCTTTGTCTTCTCCCTTGTGGATGCAATGAATGGAAGGAAGGTG
TTGTGGAATGTTTCCTTCGTTAAGTCACAGGAAACGGAATGTACCTACTTCTCCACACCGCTGCTGCTTGGGAAAA
AGGGCATCGAGAAGAACCTGGGCATCGGCAAAGTCTCCTCTTTTGAGGAGAAGATGATCTCGGATGCCATCCCCG
AGCTGAAGGCCTCCATCAAGAAGGGGGAAGATTTCTGTAAGACCTGAAGTGAAGCCGCTGTGACGGGTGGCCAGT
TTCCTTAATTTATGAAGGCATCATGTCACTGCAAAGCCGTTGCAGATAAACTTTGTATTTAATTTGCTTTGGTG
ATGATTACTGTATTGACATCATCATGCCTTCCAAATTGTGGGTGGCTCTGTGGGCGCATCAATAAAAGCCGTCCT
TGATTTTATTTTCAAGGTCCTTCTGTAAAAA

WO 2004/030615

PCT/US2003/028547

2510/6881
FIGURE 2307

MLSALARPASAALRRSFSTSAQNNAKVAVLGASGGIGQPLSLLLKNSPLVSRLTLYDIAHTPGVAADLSHIETKA
AVKGYLGPEQLPDCLKGCDVVVIPAGVPRKPGMTRDDLFTNATIVATLTAACAQHCPEAMICVIANPVNSTIPI
TAEVFKKHGVNPNKIFGVTTLDIVRANTFVAELKGLDPARVNVVPVIGGHAGKTIIP LISQCTPKVDFFPDQLTA
LTGRIQEAGTEVVKAKAGAGSATLSMAYAGARFVFSLVDAMNGKEGVVECSFVKSQETECTYFSTPLLLGKKGIE
KNLGIGKVSSFEEKMISDAIPELKASIKKGEDEVKTLK

WO 2004/030615

PCT/US2003/028547

2511/6881
FIGURE 2308

CTCAAACACCGCCTGCTAAAAATACCCGACTGGAGGAGCATAAAAGCGCAGCCGAGCCCAGCGCCCCGCACTTTT
CTGAGCAGACGTCCAGAGCAGAGTCAGCCAGCATGACCGAGCGCCGCGTCCCCCTTCTCGCTCCTGCGGGGCCCCA
GCTGGGACCCCTTCCGCGACTGGTACCCGCATAGCCGCTCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGG
AGGAGTGGTTCGAGTGGTTAGGCGGCAGCAGCTGGCCAGGCTACGTGCGCCCCCTGCCCCCGCCGCCATCGAGA
GCCCCGCAGTGGCCGCGCCCGCTACAGCCGCGCGCTCAGCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGC
ACACTGCGGACCGCTGGCGCGTGTCCCTGGATGTCAACCACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGG
ATGGCGTGGTGGAGATCACCGGCAAGCACGAGGAGCGGCAGGACGAGCATGGCTACATCTCCCGGTGCTTCACGC
GGAAATACACGCTGCCCCCGGTGTGGACCCACCCAAGTTTCCTCCTCCCTGTCCCTGAGGGCACACTGACCG
TGGAGGCCCCCATGCCCAAGCTAGCCACGCAGTCCAACGAGATCACCATCCCAGTCACCTTCGAGTCGCGGGCCC
AGCTTGGGGGCCCAGAAGCTGCAAAATCCGATGAGACTGCCGCCAAGTAAAGCCTTAGCCTGGATGCCACCCCT
GCTGCCGCCACTGGCTGTGCCTCCCCCGCCACCTGTGTGTTCTTTTGATACATTATCTTCTGTTTTTCTCAAAT
AAAGTTCAAAGCAACCACCTGTAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2512/6881
FIGURE 2309

MTERRVPFSLLRGPSWDPFRDWYPHSRLFDQAFGLPRLPEEWSQWLGGSSWPGYVRPLPPAAIESPAVAAPAYSR
ALSRQLSSGVSEIRHTADRWRVSLDVNHFAPDELTVKTKDGVVEITGKHEERQDEHGYISRCFTRKYTLPPGVDP
TQVSSSLSPEGTLTVEAPMPKLATQSNEITIPVTFESRAQLGGPEAAKSDETAAK

WO 2004/030615

PCT/US2003/028547

2513/6881
FIGURE 2310

ATAAAAGCGCAGCCGAGCCCAGCGCCCCGCACTTTTCTGAGCAGACGTCCAGAGCAGAGTCAGCCAGCATGACCG
AGCGCCGCGTCCCCCTTCTCGCTCCTGCGGGGGCCCCAGCTGGGACCCCTTCCGCGACTGGTACCCGCATAGCCGCC
TCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGGAGGAGTGGTCGCAGTGGTTAGGCGGCAGCAGCTGGCCAG
GCTACGTGCGCCCCCTGCCCCCGCCGCCATCGAGAGCCCCGCACTGGCCGCGCCCGCTACAGCCGCGCGCTCA
GCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGCACACTGCGGACCGCTGGCGCGTGTCCCTGGATGTCAACC
ACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGGATGGCGTGGTGGAGATCACCAGTGAGCCCCCTGCTCCT
GCAGGGGAGAGGAGGAGGCTAGCAGGGCGGGCAGGGCCGGGGGCGTGCGGTTGAAACGGGGGTCCCCGGGGGCCTG
GGGAGTTAAACGTTGGCCCAGCACCGGGAAAAACAGGACTCCTGATTCCCTTGCTCAGGAATTGGGAGTGCGGGT
CGCTTCTAAGGGCGCTTTCTGCTCTGTAATCCCAGCGCTTTGGGAGGCCGAGACGGGAGGATCGCTTGAGGCCAG
GAGTTCAAGACTAGCCTGGGCAACATAGCGAGACGCGCCCCCCCCGCCCCGACCCCGCGCCATTAC

WO 2004/030615

PCT/US2003/028547

2514/6881
FIGURE 2311

CAGAGTCAGCCAGCATGACCGAGCGCCGCGTCCCCCTTCTCGCTCCTGCGGGGGCCCCAGCTGGGACCCCTTCCGCG
ACTGGTACCCGCATAGCCGCTCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGGAGGAGTGGTCGCAGTGGT
TAGGCGGCAGCAGCTGGCCAGGCTACGTGCGCCCCCTGCCCCCGCCGCCATCGAGAGCCCCGAGTGGCCGCGC
CCGCCTACAGCCGCGCGCTCAGCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGCACACTGCGGACCGCTGGC
GCGTGTCCCTGGATGTCAACCACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGCTAGCCACGCAGTCCAACG
AGATCACCATCCCAGTCACCTTCGAGTCGCGGGCCCAGCTTGGGGGGCCAGAAGCTGCAAAATCCGATGAGACTG
CCGCCAAGTAAAGCCTTAGCCCGGATGCCACCCCTGCTGCCGCCACTGGCTGTGCCTCCCCCGCCACCTGTGTG
TTCTTTTGATACATTTATCTTCTGTTTTTCTCAAATAAAGTTCAAAGCAACC

WO 2004/030615

PCT/US2003/028547

2515/6881
FIGURE 2312A

GGACTGCGAAAGGAGCAGGGTTGCGGAGCTAGGGCTCCAGCCTGCGGCCGCGCATTCTTGCGTCTGGCCAGCCGC
GAGCTCTAAGGGTCGGCCCCGCCCCGGTCCGCCCCCGCGGCTCCCTGCCAGGCTCTCGCGGGCGCGCTCGGGGTGG
GGCCTCGCGGCTGGCGGAGATGCGGCCGGGGCTGCGCGGTGGTGATGCGAGCCTGCAGGGCGGCGCGCCGGGGCA
GCCGGAGCCGCGCGCCGCGGCGCTGTAATCGGACACCAAGAGCGCTCGCCCCCGGCCTCCGGCCACTTTCCATTCT
ACTCCGAGGTGCTTGATTGAGCGACGCGGAGAAGAGCTCCGGGTGCCGCGGCACTGCAGCGCTGAGATTCTTTTA
CAAAGAACTCAGAGGACCGGGAAGAAAGAAATTTACCTTTGCGACGTGCTAGAAAATAAGGTGCTCTGGGAAAA
GGACTGGAGACACAAGCGCATCCAACCCCGGTAGCAAACCTGATGACTTTTTCCGTGCTGATTTCTTTCAACCTCGG
TATTTTCCCTTGATATTAACCTTGACATATCTGAAGAAATGGCATTCCGGACAATTTGCGTGTTGGTTGGAGTATT
TATTTGTTCTATCTGTGTGAAAGGATCTTCCAGCCCCAAGCAAGAGTTTATTTAACATTTGATGAACCTTCGAGA
AACCAAGACCTCTGAATACTTCAGCCTTTCCACCATCCTTTAGACTACAGGATTTTATTAATGGATGAAGATCA
GGACCGGATATATGTGGGAAGCAAAGATCACATTCTTTCCCTGAATATTAACAATATAAGTCAAGAAGCTTTGAG
TGTTTTCTGGCCAGCATCTACAATCAAAGTTGAAGAATGCAAAATGGCTGGCAAAGATCCACACACGGCTGTGG
GAACCTTTGCCGTGTAATTCAGACTTTCAATCGCACACATTTGTATGTCTGTGGGAGTGGCGCTTTAGTCCTGT
CTGTACTTACTTGAACAGAGGGAGGAGATCAGAGGACCAAGTTTTCATGATTGACTCCAAGTGTGAATCTGGAAA
AGGACGCTGCTCTTTCAACCCCAACGTGAACACGGTGTCTGTTATGATCAATGAGGAGCTTTTCTCTGGAATGTA
TATAGATTTTATGAGGACAGATGCTGCTATTTTCGAAGTTTAACCAAGAGGAATGCGGTGAGAACTGATCAACA
TAATTCAAAATGGCTAAGTGAACCTATGTTTGTAGATGCACATGTATCCAGATGGTACTGATCCAAATGATGC
TAAGGTGTACTTCTTCTTCAAAGAAAACTGACTGACAATAACAGGAGCACGAAACAGATTCAATCCATGATTGC
TCGAATATGCTTAATGACACTGGTGGACTGCGTAGCCTTGTCAACAAGTGGACCACTTTCTTAAAGGCGAGGCT
GGTGTGCTCGGTAACAGATGAAGACGGCCAGAAACACACTTTGATGAATTAGAGGATGTGTTTCTGCTGGAAAC
TGATAACCCGAGGACAACACTAGTGATGGCATTTTTACAACATCAAGCTCAGTTTTCAAAGGATCAGCCGTGTG
TGTGTATCATTTATCTGATATACAGACTGTGTTTAAATGGGCTTTTGCCACAAAGAAGGGCCCAATCATCAGCT
GATTTCCATCAGGGCAGAAATCCATATCCTCGCCCTGGAACCTGTCCAGGAGGAGCATTTACACCCAAATGCGG
AACCACCAAGGAGTTCCAGATGATGTTGTCACTTTTATTCGGAACCATCCTCTCATGTACAATTCATCTACCC
AATCCACAAAAGGCTTTGATTGTTGCTATTGGCACTGACTACAAGTATACAAAGATAGCTGTGGATCGAGTGAA
CGCTGCTGATGGGAGATACCATGCTCTGTTTCTCGAACAGATCGGGGTACTGTGCAAAAAGTGGTTGTTCTTCC
TACTAACAACCTCTGTGAGTGCGAGCTCATTCTGGAGGAGCTGGAAGTCTTTAAGAATCATGCTCCTATAACAAC
AATGAAAATTTATCTATAAAAGCAACAGTTGTATGTGAGTTCCAATGAAGGGGTTTCCAGGTATCTCTGCACCG
CTGCCACATCTATGGTACAGCCTGTGCTGACTGCTGCGCTGGCGCGGGACCCTTATTGCGCCTGGGATGGCCATTCT
CTGTTCCAGATTCTACCCAACTGGGAAACGGAGGAGCCGAAGACAAGATGTGAGACATGGAAACCCACTGACTCA
ATGCAGAGGATTTAATCTAAAAGCATACAGAAATGCAGCTGAAATTGTCCAGTATGGAGTAAAAAATAACACCAC
TTTTCTGGAGTGTGCCCCAAGTCTCCGACGGCATCTATCAAGTGGCTGTTACAGAAAGACAAAGACAGGAGGAA
AGAGGTTAAGCTGAATGAACGAATAATAGCCACTTCACAGGGACTCCTGATCCGCTCTGTTTACGGGTTCTGACCA
AGGACTTTATCACTGCAATGCTACAGAAAATAGTTTCAAGCAGACCATAGCCAAGATCAACTTCAAAGTTTTAGA
TTCAGAAATGGTGGCTGTTGTGACGGACAAATGGTCCCCATGGACCTGGGCCAGCTCTGTGAGGGCTTTACCCTT
CCACCCGAAGGACATCATGGGGGCATTACGCCACTCAGAAATGCAGATGATTAACCAATATTGCAAAGACACTCG
GCAGCAACATCAGCAGGGAGATGAATCACAGAAAATGAGAGGGGACTATGGCAAGTTAAAGGCCCTCATCAATAG
TCGGAAAAGTAGAAACAGGAGGAATCAGTTGCCAGAGTCATAATATTTTCTTATGTGGGTCTTATGCTTCCATTA
ACAAATGCTCTGTCTTCAATGATCAAATTTTGTAGCAAGAAACTTGTGCTTTACCAAGGGGAATTACTGAAAAAG
GTGATTACTCCTGAAGTGAGTTTTACACGAACTGAAATGAGCATGCATTTTCTTGTATGATAGTACTAGCACTA
GACATGTCATGGTCTCATGGTGCATATAAATATATTTAACTTAACCCAGATTTTATTTATATCTTTATTCACCT
TTTCTTCAAATCGATATGGTGGCTGCAAACTAGAATTGTTGCATCCCTCAATTGAATGAGGGCCATATCCCTG
TGGTATTCTTTCTGCTTTGGGGCTTTAGAATTCTAATTGTGAGTATTTTGTATATGAAAACAAGTTCCAAAT
CCACAGCTTTTACGTAGTAAAGTCATAAATGCATATGACAGAATGGCTATCAAAAGAAATAGAAAAGGAAGACA
GCATTTAAAGTTGTATAAAAACATGAGTTATTCTATAAAGAGAAAATGATGAGTTTTTATGGTTCCAATGAAATAT
GTTGGGGTTTTTTTTAAGATTGTAAAAATAATCAGTTACTGGTATCTGTCACTGACCTTTGTTTCTTTATTCAGGA
AGATAAAAATCAGTAACCTACCCCATGAAGATATTTGGTGGGAGTTATATCAGTGAAGCAGTTTGGTTTATATTC
TTATGTTATCACCTTCCAAACAAAAGCACTTACTTTTTTTGGAAGTTATTTATTTTAGACTCAAAGAATATAATC

WO 2004/030615

PCT/US2003/028547

2516/6881
FIGURE 2312B

TGGCACTACTCAGTTATTACTGTTTGTCTCTTATTCCCTAGTCTGTGTGGCAAATTAAACAATATAAGAAGGAA
AAATTTGAAGTATTAGACTTCTAAATAAGGTGTGAAATCATCAAAAAGAAAAATCAAAGTAGAACTACTAATTT
TTTAAGAGGAATTTATAACAAATATGGCTAGTTTTCAACTTCAGTACTCAAATTCATGATTCTTCTCTTTTATTA
AAACCAGTCTCAGATATCATACTGATTTTTAAGTCAACACTATATATTTTATGATCTTTTCAGTGTGATGGCAAG
GTGCTTGTATGTCTAGAAAGTAAGAAAACAATATGAGGAGACATTCTGTCTTTCAAAGGTAATGGTACATACG
TTCCTGGTCTCTAAGTGTAAAAGTAGTAAATTTTGTGATGAATAAAATAATTATCTCCTAATTGTATGTTAGAA
TAATTTTATTAGAATAATTTCACTACTGAAATTTTTCTCCAAATAAAAAATTAGATGGAAAAATGTGAAAAAAT
TATTCATGCTCTCATATATATTTTAAAAACACTACTTTTGCTTTTTTATTTACCTTTTAAAGACATTTTCATGCTT
CCAGGTAAAAACAGATATTGTACCATGTACCTAATCCAAATATCATATAAACATTTTATTTATAGTTAATAATCT
ATGATGAAGGTAATTAAGTAGATTATGGCCTTTTTAAGTATTGCAGTCTAAACTTCAAAAACATAAATCATTG
TCAAAATTAATATGATTATTAATCAGAATATCAGAATATGATTCACTATTTAACTATGATAAATTATGATAATA
TATGAGGAGGCCTCGCTATAGCAAAAATAGTTAAATGCTGACATAACACCAAACTTCATTTTTTAAAAAATCTG
TTGTTCCAAATGTGTATAATTTTAAAGTAATTTCTAAAGCAGTTTATTATAATGGTTTGCCTGCTTAAAGGTAT
AATTAACTTCTTTTCTCTTCTACATTGACACACAGAAATGTGTCAATGTAAAGCCAAAACCATCTTCTGTGTTT
ATGGCCAATCTATTCTCAAAGTTAAAGTAAATTTGTTTCAGAGTCACAGTTCCTTTTATTTACATAAGCCCAA
ACTGATAGACAGTAACGGTGTGTTTATGTTTATACTATATTTGTGCTATTTAATTCTTTCTATTTTACAATTATTA
AATTGTGTACACTTTCATTACTTTTAAAAATGTAGAAATCTTCATGAACATAACTCTGCTGAATGTAAAGAAA
ATTTTTTTTCAAAAATGCTGTTAATGTATACTACTGGTGGTTGATTGGTTTTATTTTATGTAGCTTGACAATTCA
GTGACTTAATATCTATTCATTGTTATTGTACATAAAATTTCTAGAAATACACTTTTTTCCAAAGTGTAAAGTTT
GTGAATAGATTTTAGCATGATGAACTGTCATAATGGTGAATGTTCAATCTGTGTAAAGAAAACAACTAAATGTA
GTTGTCACACTAAAATTTAATTGGATATTGATGAAATCATTGGCCTGGCAAATAAAACATGTTGAATTCCCC

WO 2004/030615

PCT/US2003/028547

2517/6881
FIGURE 2313

CTTTCTGTCTTGATGACCTGTCTAGTGCTATAAATGAACACCTTTCTGCCCCGTGGACGCCGCCGAAGAAGCATCG
TTAAAGTCTCTCTTCTCCCTGCCGTGCTAGTCTAAGTCAGAGTCTCCTAAAGAGCCCAAACAGCTGAGGAAGCTCT
TCATTGGAGGGTTGAGCTTTGAAACAACCAATGAGAGTCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCATGG
ACTGTGTGGTAATGAGAGATCCAAACACCAAGTGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGG
AGGTGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAA
GAGAAGATTCTCAAAGACCAGGTGCCCCACTTAACTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACCA
AAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCA
GTGGCAAGAAAAAGGGGCTTTGCCCTTTGTAACCTTTGACGACCATGACTCTGTGGATAAGATTGTCATTTCAGAAAT
ACCATACTGTGAATGGCCACATCTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAGAGATGGCGAGTACTTCATCCA
GCCAAAGAGGTCAAAGTGGTTCTGGAACTTTAGTGGTGGTCGTGGAGGTGGTTTCAGTGGGAATGACAACTTTG
GTCATGGAGGAAACTTCAGTGGTCGTGGTGGCTTTGGTGGCAGCCGTGGTGCTGGTGGATATGGTGGCAGTGGGG
ATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGGAAGCTACAATGATTTTGGCAATTACA
ACAATCAGTCTTCAAATTTTAGACCCATGAAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCTATGGCGGTG
GAGGCAATACTTTGCAAAACCAAGGTGGCTATGGCAGTTCAGCAGCAGCAGTAGCTATGGCAGTGGCAGAAGAT
TTTAATTAGGAAACAAAGCTTAGCAGGAGAGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAAGAGATT
TGTGAATCAGCCAAGCACAGTGGTGGCAGGGCCTAGCTGCTACAAAGAAGACGTGTTTTAGACACATACTCATG
TGTATGGGCAAAAACTCGAGGACTGTATTTGTGACTAGCTGTATAACAGGTTATTTTAATTTCTATTCTGCGGA
AAGTGTAAGCATTCACAAAGGGTTTAATGTAGTTTTTTTTTGCACCCATGCTGTTGATTATTAAATGTAA
TAGTCTGATTGTGACACTGAATAAATGTCTTTTTT

WO 2004/030615

PCT/US2003/028547

2518/6881
FIGURE 2314

MSKSESPKEPKQLRKLFIGGLSFETTNESLRSHFEQWGTLMDCVVMRDPNTKCSRGFGFVTYATVEEVDAAMNAR
PHKVDGRVVESKRAVSREDSQRPGAHLTVKKIFVGGIKEDTKEHHLRDYFEQYGKIEVIEIMTDRGSGKKRGFAF
VTFDDHDSVDKIVIQKYHTVNGHICEVRKALSKQEMASTSSSQRGQSGSGNFVVEATMILAITTISLQILD

WO 2004/030615

PCT/US2003/028547

2519/6881
FIGURE 2315

CCTTTCTGCCCCGTGGACGCCGCCGAAGAAGCATCGTTAAAGTCTCTCTTCTCCCTGCCGTCATGTCTAAGTCAGA
GTCTCCTAAAGAGCCCCAAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGAGCTTTGAAACAACCAATGAGAGTCT
GAGGAGCCATTTTGAGCAATGGGGAACGCTCATGGACTGTGTGGTAATGAGAGATCCAAACACCAAGTGCTCCAG
GGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGGTGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGA
TGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAAGAGAAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAA
AAAGATATTTGTTGGTGGCATTAAAGAAGACACCAAAGAACATCACCTAAGAGATTATTTTGAACAGTATGTGGA
AGCAATTTTGGAGGTGGTGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTAGACCCATG
AAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCCTATGGCGGTGGAGGCAATACTTTGCAAAACCAAGGTGGC
TATGGCAGTTCCAGCAGCAGCAGTAGCTATGGCAGTGGCAGAAGATTTTAATTAGGAAACAAAGCTTAGCAGGAG
AGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAAGAGATTTGTGAACTCAGCCAAGCACAGTGGTGGCA
GGGCCTAGCTG

WO 2004/030615

PCT/US2003/028547

2520/6881
FIGURE 2316

AAGTCTCTCTTCTCCCTGCCGTGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCAAACAGCTGAGGAAGCTCTTCA
TTGGAGGGTTGAGCTTTGAAACAACCAATGAGAGTCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCATGGACT
GTGTGGTAATGAGAGATCCAAACACCAAGTGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGG
TGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACCAAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACTTTGACGACCATGACTCTGTGGATAAGATTGTCATTTCAGAAATACC
ATACTGTGAATGGCCACATCTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAGAGATGGCGAGTACTTCATCCAGCC
AAAGAGGTCAAAGTGGTTCTGGAACTTTAGTGGTGGTTCGTGGAGGTGGTTTCAGTGGGAATGACAACTTTGGTC
ATGGAGGAACTTCAGTGGTTCGTGGTGGCTTTGGATGGCTATAATGGATTGGTAATGATGGAAGCAATTTTGGA
GGTGGTGGGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTAGACCCATGAAGGGAGGAAAT
TTTGGAGGCAGAAGCTCTGGCCCCTATGGCGGTGGAGGCAATACTTTGCAA

WO 2004/030615

PCT/US2003/028547

2521/6881
FIGURE 2317

CCCTGCCGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCAAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGAG
CTTTGAAACAACCAATGAGAGTCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCATGGACTGTGTGGTAATGAG
AGATCCAAACACCAAGTGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGGTGGATGCAGCTAT
GAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAAGAGAAGATTCTCAAAG
ACCAGGTGCCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACCAAAGAATCACCTAAG
AGATTATTTTGAACAGTATGGAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGG
CTTTGCCCTTTGTAACCTTTGACGACCATGACTCGGTGGCTTTGGTGGCAGCCGTGGTGCTGGTGGATATGGTGGC
AGTGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGGAAGCTACAATGATTTTGGC
AATTACAACAATCAGTCTTCAAATTTTAGACCCATGAAGGG

WO 2004/030615

PCT/US2003/028547

2522/6881
FIGURE 2318

ATGCCAACTATGTCACCTTTACGGATACCAAACAATTGATTAGTGATACTCCAAATAATCAAGTTCCAATGAAC
CGTGCCAGCATGGCTTTTGATGCCAAATGTCTGACTGGATGCAGATTTGATGATGCCATTGTCCAGTTTGATATG
ACATATTGGCCTTTCACGGTGGTAAATGATGCTGGCAGGCCCAAGGTCCAAGTAGAGTATGAGAGAGACAAAAAG
CTGCTACCCATAGGAGGTGTCTTCTATGGTTCTGACAAAGATGAAGGAAATTGCAAAAAGTCTACCTTGGGAAGAC
TGTTACCAATGCTGTGGTCACAGTGCCAGCTTACTTGAATGA

WO 2004/030615

PCT/US2003/028547

2523/6881
FIGURE 2319A

GTAACAACCGTCAACCTGGGTCCCGACTGCCACCTCCTCCTCCCCCTCCCCCAACAACAACAACAAC
AACTCCAAGCACACCGGCCATAAGAGTGCGTGTGTCCCCAACATGACCGAACGAAGAAGGGACGAGCTCTCTGAA
GAGATCAACAACCTTAAGAGAGAAGGTTCATGAAGCAGTCGGAGGAGAACAACAACCTGCAGAGCCAGGTGCAGAAG
CTCACAGAGGAGAACACCACCCTTCGAGAGCAAGTGGAACCCACCCCTGAGGATGAGGATGATGACATCGAGCTC
CGCGGTGCTGCAGCAGCTGCTGCCCCACCCCTCCAATAGAGGAAGAGTGCCAGAAAGACCTCCAGAGAAGTTT
GATGGCAACCCAGACATGCTGGCTCCTTTCAITGGCCAGTGCCAGATCTTCATGGAAAAGAGCACCAGGGATTTC
TCAGTTGATCGTGTCCGTGTCTGCTTCGTGACAAGCATGATGACCGGCCGTGCTGCCCCGTGGGCCCTCAGCAAAG
CTGGAGCGCTCCCCTACCTGATGCACAACCTACCCAGCTTTCATGATGGAAATGAAGCATGTCTTTGAAGACCCT
CAGAGGCGAGAGGTTGCCAAACGCAAGATCAGACGCTGCGCCAAGGCATGGGGTCTGTCTCATCGACTACTCCAAT
GCTTTCCAGATGATTGCCAGGACCTGGATTGGAACGAGCCTGCGCTGATTGACCACTACCAGAGGGCCTCAGC
GACCACATTCAGGAGGAGCTCTCCCACCTCGAGGTGCGCAAGTCGCTGTCTGCTCTGATTGGGCAGTGCAATTCAC
ATTGAGAGAAGGCTGGCCAGGGCTGCTGCAGCTCGCAAGCCAGCTCGCCACCCCGGGCGCTGGTGTGCCTCAC
ATTGCAAGCCACCACCAGGTAGATCCAACCGAGCCGGTGGGAGGTGCCCGCATGCGCCTGACGCAGGAAGAAAA
GAAAGACGCAGAAAGCTGAACCTGTGCCTCTACTGTGGAACAGGAGGTCACTACGCTGACAATGTCTCTGCCAAG
GCCTCAAAGTCTTCGCCGGCGGGAAACTCCCGGCCCGCTGTAGAGGGACCTTCAGCGACCGGGCCAGAAATAA
TAAGGTCCCCACAAGATGATGCCTCATCTCCACACTTGCAAGTGATGCTCCAGATTCATCTTCGGGCAGACACA
CCCTGTTCTGTCGAGCCATGATCGATTCTGGTGCTTCTGGCAACTTCATTGATCAGGAATATGTTGCTCAAAATG
GAATTCTCTAAGAATCAAGGACTGGCCAATACTTGTGGAAGCAATTGATGGGCGCCCCATAGCATCGGGCCAG
TTGTCCACGAAACTCACGACCTGATAGTTGACCTGGGAGATCACCGAGAGGTGCTGTCAATTTGATGTGACTCAGT
CTCCATTCTTCCCTGTGCTCCTAGGGGTTCGCTGGCTGAGCACACATGATCCCAATATCACATGGAGCACTCGAT
CTATCGTCTTTGATTCTGAATACTGCCGCTACCACTGCCGGATGTATTCTCCAATACCACCTCGCTCCCACCAC
CAGCACCACAACCGCCACTCTATTATCCAGTAGATGGATACAGAGTTTACCAACCAGTGAGGTATTACTATGTCC
AGAATGTGTACACTCCAGTAGATGAGCACGTCTACCCAGATACCCGCTGGTTGACCCTCACATAGAAATGATAC
CTGGAGCACACAGTATTTCCAGTGGACATGTGTATTCACTGTCCGAACCTGAAATGGCAGCTCTTCGAGATTTTG
TGGCAAGAAATGTAAAGATGGGCTAATTACTCCAACGATTGCACCTAATGGAGCCCAAGTTCTCCAGGTGAAGA
GGGGGTGGAACTGCAAGTTTCTTATGATTGCCGAGCTCCAACAATTTTACTATCCAGAATCAGTATCCTCGCC
TATCTATTCCAAATTTAGAAGACCAAGCACACCTGGCAACGTACACTGAATTCGTACCTCAAATACCTGGATACC
AAACATACCCACATATGCCGCGTACCCGACCTACCCAGTAGGATTGCGCTGGTACCCAGTGGGACGAGACGGAC
AAGGAAGATCACTATATGTACCTGTGATGATCACTTGGAAATCCACACTGGTACCGCCAGCCTCCGGTACCACAGT
ACCCGCCGCCACAGCCGCCGCTCCACCACCACCGCCGCGCTCCATCTTACAGTACCCTGTAAATACCTG
TCATGTCTTTCAGGATCTCTGCCCTCAAATTTATTCTGTTTCACTTCTCAATCAGTGACTGTGTGCTAAATTT
TAGGCTACTGTATCTTCAGGCCACCTGAGGCACATCTCTCTGAAACGGCTATGGAAGGTTAGGGCCACTCTGGA
CTGGCACACATCTTAAGCACCAAAAGACCTTCAACATTTTCTGAGAGCAACAGAGTATTTGCCAATAAATGATC
TCTCATTTTCCACCTTGACTGCCAATCTAATAAAATAATTAATAAGTTTACTTTCCAGCCAGTCTGGAAAGTC
TGGGTTTTACCTGCCAAAACCTCCATCACCATCTAAATTATAGGCTGCCAAATTTGCTGTTTAAACATTTACAGAG
AAGCTGATACAAACGCAGGAAATGCTGATTTCTTTATGGAGGGGAGACGAGGAGGAGGAGGACATGACTTTTCT
TGCGGTTTCGGTACCCTCTTTTAAATCACTGGAGGACTGAGGCCTTATTAAGGAAGCCAAAATTATCGGTGCAG
TGTGAAAGGCTTCCGTGATCCTCTCGCTGCACCTTAGAACTTCACCGTCTTCAAACCTCCATTTCCATGGTTT
TGTTAATTTCTAAGGAGCAGCAACTCGACTGGTTCTCCAGGAGCAGGAAAAACCCTTGTGACATGAAACATCTC
AGGCTGAAAAGAAAGTGCTCTCTCAGATGGACTCTTGATGTTAAGACTATGTCTTCACATCATGGTGCAATC
ACATGTACCAATGACTCCGGCTTTGACACAACACCTTACCATCATCATGCCATGATGGCTTCCACAAGCATT
AACCTGGTAACCAGAGATTACTGGTGGCTCCAGCGTTGTTAGATGTTTATGAAATGTGACCACCTCTCAATCACC
TTTGAGGGCTAAAGAGTAGCACATCAAAAGGACTCCAAAATCCCATACCAACTCTTAAGAGATTTGTCTGGTA
CTTCAGAAAGAAATTTTCATGAGTGTTCTTAATTGGCTGGAAGAGCAGCTGACGTTTTGGAAGAATCTATCCA
TGTGTCTGCCTCCATATGCATCTGGGCATTTTCATCTTCAGTCCCCTCATTAGACTGTAGCATTAGGATGTGTGGA
GAGAGGAGAAATGATTTAGCACCCAGATTACACTCCTATGCCTGGAAGGGGACATCTTTGAAGAAGAGGAATT
AGGGCTGTGGACACTGTCTTGAGGATGTGGACTTCCTTAGTGAGCTCCACATTACTTGATGGTAACCACTTCAA
AGGATCAGAATCCACGTAATGAAAAAGGTCCCTCTAGAGGATGGAGCTGATGTGAAGCTGCCAATGGATGAAAA

WO 2004/030615

PCT/US2003/028547

2524/6881
FIGURE 2319B

CCTCAGAAAGCAACTCAAAGGACTCAAAGCAACGGACAACACAAGAGTTGTCTTCAGCCCAGTGACACCTCTGAT
GTCCCCTGGAAGCTTTGTGCTAACCTGGGACTGCCTGACTTCCTTTAGCCTGGTCCCTTGCTACTACCTTGAAC
GTTTTATCTAACCTCTCTTTTTCTGTTAATTCTTTGCTACTGCCATTGACCCTGCTGCAGGATTTGTGTCAATTT
TCCTGCCTGGTTGCTGAGACTCCATTTTGTGCCACACACAGAGATGTAAGAGGCAGGCTTTAATTGCCAAAGCA
CAGTTTGAGCAGTAGAAAACAACATGGTGTATATCTCAAATTGCCTGACATGAAGAGGAGTCTAACGGTGAAGTT
TCACTTTTTCATCAGCATCATCTTTCACATGTTTATTATCATCCGCTCTTATTCTTGTCATGTTTAAACACTTAAAA
TTTTTAGTATAATTTTTAGTGTGTTTTGAAGTGGTGAAGGCTTTCAAAAACCTTCCATTGAATTACAAAGCACT
ATCCAGTTCTTATTGTTAAACTAAGTAAAAATGATAAGTAACATAGTGTAAAATATTCCTTTACTGTGAACCTCT
TACAATGCTGTGAATGAGAGGCTCCTCAGAACTGGAGCATTGTGATAATAATTCATCCTGTTTCATCTTCAATTTT
AACATCATATATAATTTCAATTCTATCAATTGGGCCTTTAAAAATCATATAAAAGGATATAAAATTTGAAAAGAG
AAACCTAATTGGCTATTTAATCCAAAACAACCTTTTTTTTTTCTTCAATGGAATCAGAAAGCTTGTCATCACTC
ATGTGTTTTAGAGTAATTACTTTTAAAATGGTGCATTTGTGCTTCTGAACATTTTGAAGAGTCACTTCTGTGTTA
CCTCAAGTATCAATTCATCCTCCATACATTTGAATTCAAGTTGTTTTTGTCAAATTTACAGTTGTCAATTGATC
TTCAAGCTGCAGGGTGCCTAGAAATGGGCCGTTGTCTGTAGCCCTGGCATGTGCACACGGACATTTGCCACCACT
GCAAGCAAAAGTCTGGAGAAGTTCACCAACGACAAGAAGCATTAGGGAATATGCTGCTGTGGGTTAACAACCTC
AGAAAGTCCCTGATCCACATTTGGCTGTTTACTAAAGCTTGTGATTAACTTTTTGGCAGTGTGTACTATGCTCTA
TTGCTATATATGCTATCTATAAATGTAGATGTTAAGGATAAGTAATTTCTAAATTTATTATTCTATAGTTTGAAG
TTTGGTTAAGTTTCTTTCACTCAATTGATTTATTTTGTGTTAATCAAATTTATGTTAATTGGATCCTTTAAAT
TTTTTTTTGGCATTTTCCAACAAAAATGGCTTTATTCATAAGAAAGGAAAAAATCAATGGAATTTGATATCTAAA
GAAGTTAGAAAGGGAGCAAAATAAAAAACATAAAGGAGATAGATGAATTAGTAAGCAAATCAGTAGTCGAGTTTT
TCAAAC TGGCAAAATTAATTAATTGACTTTTAGCCCAAATTTACATTGTTAATTAAATCAAGAAGGAAGAAGATC
TAAGAGCTCCCATTGATAGGCAAGCCTAGAGAGAAGTCTAAATTTATCATGCTAGGATATTGAAACACAGAAA
GTTTACATACATTTATGAAGGGTCAATTTAGTTTGGACAGTGAGGTATTTGTCTTAGTGGAAGGAGGAGAAATTA
GTCTGATCAAATCGTGAAGTAATACAGTGAACCTGCAGGTGCACAAAATAAGAGGGCCACATCTATATGGTGCAG
TCTGGAATTCTGTTTAAAGTTTGTAGGTACCTCTTGGACTTCTGAATTGATCCAGTTGTCTATCCACCACAGACATC
TCACATCAGATACAGACAGTTCCAAGATTGACAACAGAGAACAACCTGCTGGAAGACCTGGGCAGAAATGGAGA
GCCCTGCGGGAACCATGCTACATTTTCATCTAAAGAGAGAATGCACATCTGATGAGACTGAAAGTTCTTTGTGTT
TTTAGATTGTAGAATGGTATTGAATTGGTCTGTGGAAAATTGCATTGCTTTTTATTCTTTGTGTAATCAAGTTTA
AGTAATAGGGGATATATAATCATAAGCATTTTAGGGTGGGAGGGACTATTAAGTAATTTAAGTGGGTGGGGTTA
TTTAGAATGTTAGAATAATATTATGTATTAGATATCGCTATAAGTGGACATGCGTACTTACTTGTAAACCCTTTAC
CCTATAATTGCTATCCTTAAAGATTTCAAATAAACTCGGAGGGAAGTGCAGGGAGACCAACTTATTTAGAGCGAA
TTGGACATGGATAAAAACCCAGTGGGAGAAAGTTCAAAGGTGATTAGATTAATAATTTAATAGAGGATGAGTGA
CCTCTGATAAATTACTGCTAGAATGAACCTGTCAATGATGGATGGTAAATTTTCATGGAAGTTATAAAAGTGATA
AATAAAAACCCCTTGCTTTTACCCCTGTGCTAGTCCCTCCTACCCTGAACCCATTGCCCTACCCCTCCTT
CTAACTTTATTGCTGTATTCTCTTCACTCTATATTTCTCTCTATTGTGCTAATATTGCATTGCTGTTACAATAAAA
ATTCAATAAAGATTTAGTGGTTAAGTGC

WO 2004/030615

PCT/US2003/028547

2525/6881
FIGURE 2320

MTERRRDELSEEINNLREKVMKQSEENNNLQSQVQKLTEENTTLREQVEPTPEDEDDDIELRGAAAAAAPPPPIE
EECPEDLPEKFDGNPDMLAPFMAQCQIFMEKSTRDFSVDVRVRCFVTSMGTGRAARWASAKLERSHYLMHNYPAF
MMEMKHVFEDPQRREVAKRKIRRLRQGMGSVIDYSNAFQMIAQDLWNEPALIDQYHEGLSDHIQEELSHLEVAK
SLSALIGQCIHIERRLARAAAARKPRSPPRALVLPFIASHHQVDPTEPVGGARMRLTQEEKERRRKLNLCLYCGT
GGHYADNCPAKASKSSPAGNSPAPL

WO 2004/030615

PCT/US2003/028547

2526/6881
FIGURE 2321A

AGCACCACGGCAGCAGGAGGTTTCGGCTAAGTTGGAGGTAAGTGGCCACGACTGCATGCCCCGCGCCCGCCAGGTGA
TACCTCCGCCGGTGACCCAGGGGCTCTGCGACACAAGGAGTCTGCATGTCTAAGTGCTAGACATGCTCAGCTTTG
TGGATACGCGGACTTTGTTGCTGCTTGCAGTAACCTTATGCCATGCAACATGCCAATCTTTACAAGAGGAACTG
TAAGAAAGGGCCAGCCGGAGATAGAGGACCACGTGGAGAAAGGGGTCCACCAGGCCCCCAGGCAGAGATGGTG
AAGATGGTCCCACAGGCCCTCCTGGTCCACCTGGTCTCCTGGCCCCCTGGTCTCGGTGGGAACCTTTGCTGCTC
AGTATGATGGAAAAGGAGTTGGACTTGGCCCTGGACCAATGGGCTTAATGGGACCTAGAGGCCACCTGGTGCAG
CTGGAGCCCCAGGCCCTCAAGGTTTCCAAGGACCTGCTGGTGGACCTGGTGAACCTGGTCAAACCTGGTCTGCAG
GTGCTCGTGGTCCAGCTGGCCCTCCTGGCAAGGCTGGTGAAGATGGTCACCCTGGAAAACCCGGACGACCTGGTG
AGAGAGGAGTTGTTGGACCACAGGGTGCTCGTGGTTTCCCTGGAACTCCTGGACTTCTGGCTTCAAAGGCATTA
GGGGACACAATGGTCTGGATGGATTGAAGGGACAGCCCGTGCTCCTGGTGTGAAGGGTGAACCTGGTGCCCCCTG
GTGAAAATGGAACCTCAGGTCAAACAGGAGCCCGTGGGCTTCTGGTGAGAGAGGACGTGTTGGTGCCCCCTGGCC
CAGCTGGTGCCCGTGGCAGTGATGGAAGTGTGGGTCCCGTGGGTCTGCTGGTCCCATTGGGTCTGCTGGCCCTC
CAGGCTTCCCAGGTGCCCTGGCCCCAAGGGTGAATTTGGAGCTATTGGTAACGCTGGTCTGCTGGTCCCGCCG
GTCCCCGTGGTGAAGTGGGTCTTCCAGGCCTCTCCGGCCCCGTGGACCTCCTGGTAATCCTGGAGCAAACGGCC
TTACTGGTGCCAAGGGTGCTGCTGGCCTTCCCGCGTGTGCTGGGGCTCCCGGCTCCTGGACCCCGCGGTATTG
CTGGCCCTGTTGGTGCTGCCGGTGCTACTGGTGCCAGAGGACTTGTGGTGAGCCTGGTCCAGCTGGCTCCAAAG
GAGAGAGCGGTAACAAGGGTGAGCCCGGCTCTGCTGGGCCCCAAGGTCCTCCTGGTCCCAGTGGTGAAGAAGGAA
AGAGAGGCCCTAATGGGGAAGCTGGATCTGCCGGCCCTCCAGGACCTCCTGGGCTGAGAGGTAGTCTGGTCTC
GTGGTCTTCTGGAGCTGATGGCAGAGCTGGCGTATGGGCCCTCCTGGTAGTCGTGGTGCAAGTGGCCCTGCTG
GAGTCCGAGGACCTAATGGAGATGCTGGTCCGCTGGGGAGCCTGGTCTCATGGGACCCAGAGGTCTTCTGGTT
CCCCCTGGAAATATCGGCCCGCTGGAAAAGAAGGTCCTGTGGCCCTCCTGGCATCGACGGCAGGCCTGGCCCAA
TTGGCCCCGTGGAGCAAGAGGAGAGCCTGGCAACATTGGATTCCCTGGACCCAAAGGCCCACTGGTGACCCTG
GCAAAAACGGTGATAAAGGTATGCTGGTCTTGTGGTGCTCGGGTGCTCCAGGTCTGTAGTGAACAATGGTG
CTCAGGGACCTCCTGGACCACAGGGTGTTCAAGGTGGAAAAGGTGAACAGGGTCCCGCTGGTCTCCAGGCTTCC
AGGGTCTGCCTGGCCCCCTCAGGTCCCGCTGGTGAAGTTGGCAAACAGGAGAAAGGGGTCTCCATGGTGAGTTTG
GTCTCCCTGGTCTGCTGGTCCAAGAGGGGAACGCGGTCCCCAGGTGAGAGTGAGTGGTGCTGCCGGTCTACTGGTC
CTATTGGAAGCCGAGGTCTTCTGGACCCCAAGGCTGAGTGAACAAAGGGTGAACCTGGTGTGGTTGGTGCTG
TGGGCACTGCTGGTCCATCTGGTCTAGTGGACTCCAGGAGAGAGGGTGCTGCTGGCATACTGGAGGCAAGG
GAGAAAAGGGTGAACCTGGTCTCAGAGGTGAAATTGGTAACCTGGCAGAGATGGTGCTCGTGGTGCTCATGGTG
CTGTAGGTGCCCTGGTCTGCTGGAGCCACAGGTGACCGGGGCGAAGCTGGGGCTGCTGGTCTGCTGGTCTG
CTGGTCTCGGGGAAGCCCTGGTGAACGTGGCGAGGTGGTCTGCTGGCCCCAACGGATTGCTGGTCCGGCTG
GTGCTGCTGGTCAACCGGGTGCTAAAGGAGAAAGAGGAGGCAAAGGGCTAAGGGTGAACCGGTGTTGTTGGTC
CCACAGGCCCCGTGGAGCTGCTGGCCAGCTGGTCCAAATGGTCCCCCGGTCTGCTGGAAGTCGTGGTGATG
GAGGCCCCCTGGTATGACTGGTTTCCCTGGTGCTGCTGGACGGAAGTCCCCCAGGACCTCTGGTATTTCTG
GCCCCCTGGTCCCCCTGGTCTGCTGGGAAAGAAGGGCTTCTGGTCTGCTGGTGACCAAGGTCCAGTTGGCC
GAACTGGAGAAGTAGGTGCAGTTGGTCCCCCTGGCTTCGCTGGTGAGAAGGGTCCCTCTGGAGAGGCTGGTACTG
CTGGACCTCCTGGCACTCCAGGTCTCAGGGTCTTCTTGGTGCTCCTGGTATTCTGGGTCTCCCTGGCTCGAGAG
GTGAACGTGGTCTACCTGGTGTGCTGGTGCTGTGGGTGAACCTGGTCTCTTGGCATTGCCGGCCCTCCTGGGG
CCCGTGGTCTCCTGGTGTGCTGGGTAGTCTGGAGTCAACGGTGCTCCTGGTGAAGCTGGTCTGATGGCAACC
CTGGGAACGATGGTCCCCCAGGTGCGATGGTCAACCCGACACAAGGGAGAGCGCGTTACCCTGGCAATATTG
GTCCCGTTGGTGCTGCAGGTGCACCTGGTCTCATGGCCCCGTGGGTCTGCTGGCAAACATGGAAACCGTGGTG
AAACTGGTCTTCTGGTCTGTTGGTCTGCTGGTGCTGTTGGCCCAAGAGGTCTAGTGGCCACAAGGCATTG
GTGGCGATAAGGGAGAGCCCGGTGAAAAGGGGCCAGAGGTCTTCTGGCTTCAAGGGACACAATGGATTGCAAG
GTCTGCCTGGTATCGCTGGTACCATGGTGATCAAGGTGCTCCTGGCTCCGTGGGTCTGCTGGTCTTAGGGGCC
CTGCTGGTCTTCTGGCCCTGCTGGAAAAGATGGTGCACCTGGACATCCTGGTACGGTTGGACCTGCTGGCATTG
GAGGCCCTCAGGGTACCAAGGCCCTGCTGGCCCCCTGGTCCCCCTGGCCCTCCTGGACCTCCAGGTGTAAGCG
GTGGTGGTTATGACTTTGGTTACGATGGAGACTTCTACAGGGCTGACCAGCCTCGCTCAGCACCTTCTCTCAGAC
CCAAGGACTATGAAGTTGATGCTACTCTGAAGTCTCTCAACAACCAGATTGAGACCCTTCTTACTCCTGAAGGCT

WO 2004/030615

PCT/US2003/028547

2527/6881
FIGURE 2321B

CTAGAAAGAACCCAGCTCGCACATGCCGTGACTTGAGACTCAGCCACCCAGAGTGGAGCAGTGGTTACTACTGGA
TTGACCCCAACCAAGGATGCACTATGGAAGCCATCAAAGTATACTGTGATTTCCCTACCGGCGAAACCTGTATCC
GGGCCAACCTGAAAACATCCCAGCCAAGAACTGGTATAGGAGCTCCAAGGACAAGAAACACGTCTGGCTAGGAG
AAACTATCAATGCTGGCAGCCAGTTTGAATATAATGTTGAAGGAGTGACTTCCAAGGAAATGGCTACCCAACCTG
CCTTCATGCGCCTGCTGGCCAACTATGCCTCTCAGAACATCACCTACCACTGCAAGAACAGCATTGCATACATGG
ATGAGGAGACTGGCAACCTGAAAAAGGCTGTCATTCTACAGGGCTCTAATGATGTTGAACTTGTTGCTGAGGGCA
ACAGCAGGTTCACTTACACTGTTCTTGTAGATGGCTGCTCTAAAAAGACAAATGAATGGGGAAAGACAATCATTG
AATACAAAACAAATAAGCCATCACGCCTGCCCTTCCTTGATATTGCACCTTTGGACATCGGTGGTGCTGACCATG
AATTCTTTGTGGACATTGGCCAGTCTGTTTCAAATAAATGAACTCAATCTAAATTAAAAAGAAAGAAATTTGA
AAAACTTTCTCTTTGCCATTTCTTCTTCTTTTTTAAGTGAAGCTGAATCCTTCCATTTCTTCTGCACATC
TACTTGCTTAAATTGTGGGCAAAAGAGAAAAAGAAGGATTGATCAGAGCATTGTGCAATACAGTTTCATTAACTC
CTTCCCCCGCTCCCCAAAAATTTGAATTTTTTTTTCAACACTCTTACACCTGTTATGGAAAATGTCAACCTTTG
TAAGAAAACCAAATAAAAAATTGAAAAATAAAACCATAAACATTTGCACCACTTGTGGCTTTTGAATATCTTCC
ACAGAGGGGAAGTTTAAAACCCAAACTTCCAAAGGTTTAACTACCTCAAAACACTTTCCCATGAGTGTGATCCAC
ATTGTTAGGTGCTGACCTAGACAGAGATGAACTGAGGTCCTTGTTTTGTTTTGTTTCATAATACAAAGGTGCTAAT
TAATAGTATTTAGATACTTGAAGAATGTTGATGGTGCTAGAAGAATTTGAGAAGAAATACTCCTGTATTGAGTT
GTATCGTGTGGTGTATTTTTTAAAAAATTTGATTAGCATTATTTCCATCTTATTCCCAATTAAAAGTATG
CAGATTATTTGCCCAAAGTTGTCCTCTTCTCAGATTGAGCATTGTTCTTTGCCAGTCTCATTTTCATCTTCTT
CCATGGTTCCACAGAAGCTTTGTTTCTTGGGCAAGCAGAAAAATTAAATTGTACCTATTTTGTATATGTGAGATG
TTTAAATAAATTGTGAAAAAATGAAATAAAGCATGTTTGTTTTCCAAAAGAACATAT

WO 2004/030615

PCT/US2003/028547

2528/6881
FIGURE 2322

ATTTAACTTTTAAATGCTTTTTCTACAATATGCTATAAATATAAGAAAAATTAAAATTCACTAACAGCAAGACTAC
ATACCCACCCAGGTCCCGCTCCCAAAGACACACATAGAGGGACATACACACAACAATCCTAAAAATGACTTTGTA
GAGATAGGTCAC TTGGAATGTGTGTTGAAATGTTGTTGGTTTTTTTTGGTTGGTTTGT TTGTTTGT TTTTTGTTAG
ACTGATAGGGAGCCCCTCCCACTAAAGACACCCTTGATACTGTTATTTCAAGGATGAAC TTATTTATCTGGGACA
GACATCTTCAGAATGACACATGCCAAACAGTGGTTCTTATTAAATCAAAGGTT CAGATATTATCAGATTCAGAAA
TAGTGATGCTTTGTGTATCTATTTTCTTCTCTTTAAACAGAAAAAGACAAATGAATGGGGAAAGACAATCATTGA
ATACAAAACAAATAAGCCATCACGCCTGCCCTTCCTTGATATTGCACCTTTGGACATCGGTGGTGCTGACCATGA
ATTCTTTGTGGACATTGGCCCAGTCTGTTTCAAATAAATGAACTCAATCTAAATTAAAAAAGAAAGAAATTTGGA
GAAAAAGAAGGATTGATCAGAGCATTGTGCAATACAGTTTCATTAAC TCCTTCCCCCGCTCCCCCAAAATTTGA
ATTTTTTTTTCAACACTCTTACACCTGTTATGGAAAATGTCAACCTTTGTAAGAAAACCAAAATAAAATTTGAAA
AATAAAAACCATAAACATTTGCACCACTTGTGGCTTTTGAATATCTTCCACAGAGGGAAGTTTAAACCCAACT
TCCAAAGGTTTAAACTACCTCAAACACTTTCCCATGAGTGTGATCCACATTGTTAGGTGCTGACCTAGACAGAG
ATGAACTGAGGTCCTTGTTTTGTTTTGTTTCATAATACAAAGGTGCTAATTAATAGTATTT CAGATACTTGAAGAA
TGTTGATGGTGCTAGAGAATTTGAGAAGAAATACTCCTGTATTGAGTTGTATCGTGTGGTGTATTTTTTAA

WO 2004/030615

PCT/US2003/028547

2529/6881
FIGURE 2323

CATCCGTGGACTTGAGGCTGGCTCGGGCCCGCACCTCCCATCCCCAGCTGCCCCGCAACCCCCAGTGA CTCTGGGA
TCCCCCGGAGAGCCCTCCCCTCTCGGCAGGAGGGGGCTGACTCAGGGAGAAAATGGCAGTTTAGGGCCTAGGGGGC
CACGTGACCCTCCCCAGGAATGTGGTGACGTATCGGAGGCGTGTCGTCCCCAAAATTAGGGAGGAAGAGGAA
AAAAAAAAGCCAGAAAAAGTTTTCTTTCTGGAGTCCCAAACGAGGTGCGGGACGGAAGAGGGGGTGAAGGCCAG
AGGCTCGGGGCTTCAAGACCGCTGTCTGGAGTCCCCCTTTCCAGGCCATGTGCGGGCCCCACCTGGCTGCCCCGA
AGCAGCCGGAGCCCGCCAGAGCCCTCAGGGGAGGGCGATCCCCCGCGGCACCCCGGGGCCACACCGGGCCACG
GAGCAGCACTCCAGCCCCACCCAGGGTCAATTTTTGCCCCCTTCCATCTGAGCAGTGTTACCAGGGCCCCAGGGG
GACCGGAGGATCGGGGGCCGGCGTGCGGTGGGGTCCCATGGAGTACTCCAGCACACGCAGGGGGTCCCTGCAGACA
GGGGGGGCTTTCGCCCTGGAAGCCTGGACGCCGAGATAGACTTGCTGAGCAGCACGCTGGCCGAGCTGAATGGGG
GTCGGGGTCATGCGTCACGGCGACCAGACCGACAGGCATATGAGCCCCCGCCACCTCCTGCCCTACCGCACGGGCT
CCCTGAAGCCAAATCCAGCCTCGCCGCTCCCAGCGTCTCCCTATGGGGGGCCCCACTCCAGCCTCTTACACTACCG
CCAGCACCCCGGCTGGCCAGCCTTCCCCGTGCAAGTGAAGGTGGCACAGCCAGTGAGGGGGTGC GGCCCCACCCA
GGCGGGGAGCCTCTCAGGCCTCTGGGCCCCCTCCCGGGCCCCCACTTTCCTCTCCCAGGCCGAGGTGAAGTCTGGG
GGCCTGGCTATAGGAGCCAGAGAGAGCCAGGGCCAGGGGCCAAAGAGGAAGCTGCTGGGGTCTCTGGCCCTGCAG
GAAGAGGAAGAGGAGGCGAGCACGGGCCCCAGGTGCCCCTGAGCCAGCCTCCAGAGGATGAGCTGGATAGGCTGA
CGAAGAAGCTGGTTACAGACATGAACCACCCGCCAGCGGGGAGTACTTTGGCCAGTGTTGGTGGCTGCGGAGAAAG
ATGTGGTTGGGGATGGGGCTGGGGTGTGGCCCTTGATCGCGTCTTTCACGTGGGCTGCTTTGTATGTTCTACAT
GCCGGGCCCCAGCTTCGCGGCCAGCATTTCTACGCCGTGGAGAGGAGGGCATATTGCGAGGGCTGCTACGTGGCCA
CCCTGGAGAAATGTGCCACGTGCTCCCAGCCCATCCTGGACCGGATCCTGCGGGCTATGGGGAAGGCCTACCACC
CTGGCTGCTTACCTGCGTGGTGTGTACCCGCGGCCTCGACGGCATCCCCTTACAGTGGATGCTACGAGCCAGA
TCCACTGCATTGAGGACTTTCACAGGAAGTTTGGCCCAAGATGCTCAGTGTGCGGTGGGGCCATAATGCCTGAGC
CAGGTCAGGAGGAGACTGTGAGAATTGTTGCTCTGGATCGAAGTTTTACATTGGCTGTTACAAGTGCGAGGAGT
GTGGGCTGCTGCTCTCCTCTGAGGGCGAGTGTGAGGGCTGCTACCCGCTGGATGGGCACATCTTGTGCAAGGCCT
GCAGCGCCTGGCGCATCCAGGAGCTCTCAGCCACCGTCACCACTGACTGCTGAGTCTTCCCTAGAAGTACCTGCTG
GGTTCTCAGTTCAGTTCATCCTTTGATTGATCACTCTCCCTGACATCCACCTGTATGACTTTGTACCCAAAT
GCTGTCTTCTCTTCTCCAATCAAGAAATAATAATCCCTCGAGTTTACAAAACACTTCCAAGTCTGTTGTCTCAT
CTGATTCTCCCAGTAGCCCATACAGGCCCCAGTCATTGTT

WO 2004/030615

PCT/US2003/028547

2530/6881
FIGURE 2324

MSGPTWLPPKQPEPARAPQGRAIPRGTPGPPPAHGAALQPHPRVNFCLPSEQCYQAPGGPEDRGPAWVGSHGVL
QHTQGLPADRGGLRPGSLDAEIDLLSSTLAELNGGRGHASRRPDRQAYEPPPPPAYRTGSLKPNPASPLPASPYG
GPTPASYYTASTPAGPAFFVQVKVAQPVRGCGPPRRGASQASGPLPGPHFPLPGRGEVWGPGYRSQREPGPGAKE
EAAGVSGPAGRGRGGEHGPQVPLSQPPEDELDRLTKKLVHDMNHPPSGEYFGQCGGCGEDVVG DGAGVVALDRVF
HVGCFVCSTCRAQLRGQHFYAVERRAYCEGICYVATLEKCATCSQPILDRIILRAMGKAYHPGCFTCVVCHRGDGI
PFTVDATSQIHCIEDFHRKFAPRCSVCGGAIMPEPGQEETVRIVALDRSFHIGCYKCEECGLLLSSEGECCQGCYP
LDGHILCKACSAWRIQELSATVTTDC

WO 2004/030615

PCT/US2003/028547

2531/6881
FIGURE 2325

GTCTTTTCCGGCCCCCGTGCACTCTCCGCCCCGAGCGGAGCCCCCGGCTCGCGGGGATCGCCCCGAGCGCTGCG
TCCTGCGGGTCACCTAACCCATTTGTGGCTTCCTCTACCTGTGCTCAGCCATGGCCAGCGAGAGCTCACCTCTGC
TGGCCTACCGGCTCCTGGGGGAGGAGGGGGTTGCCCTCCCTGCCAATGGGGCCGGGGGTCTGGAGGGGCGTCTG
CCCGGAAGCTGTCCACCTTCCTGGGTGTGGTGGTGCCCACTGTCTGTCCATGTTTACAGCATAGTTGTTTTCTGA
GGATTGGGTTTCGTGGTGGGTTCATGCTGGGCTACTGCAGGCCCTGGCCATGCTGCTGGTTGCCTACTTCATCCTGG
CACTCACCGTCTCTCTGTCTGTGCCATCGCCACCAATGGAGCCGTGCAGGGGGGCGGAGCCTACTTCATGATCA
GCCGCACACTGGGGCCCCGAGGTCGGGGGAGCATTGGGCTCATGTTCTACCTGGCTAACGTCTGTGGCTGTGCCG
TCTCCCTCCTGGGGCTGGTGGAGTCTGTGCTTGATGCTTCGGGGCCGATGCCACAGGGGCCAGTGGGCTCCGGG
TCCTGCCCCAGGGCTACGGCTGGAACCTGCTGTATGGCTCCCTGCTGCTGGGCCCTGTGGGTGGGGTCTGCACCC
TGGGAGCCGGCCTCTATGCCCGGGCCTCATTCTCACATTCCTGCTGGTCTCTGGCTCCCTGGCCTCTGTGCTCA
TCAGTTTTTGTGGCTGTGGGGCCGAGGGACATCCGCTTGACTCCTAGGCCTGGCCCCAATGGCTCCTCCCTGCCGC
CCCGGTTTTGGCCACTTCACCGGCTTCAACAGCAGTACCTGAAGGACAACCTGGGCGCTGGCTATGCTGAGGACT
ACACCAGGGGAGCCGTGATGAATTTTGCCAGCGTCTTTGCTGCTCCTCTTAACGGCTGTACAGGCATCATGGCTG
GGGCCAACATGTACAGGGGAGCTGAAGGACCCAGCCGGGCGATCCCTCTGGGCACGATCGTCGCGCTCGCCTACA
CCTTCTTCGTCTATGTCTGCTTTTCTTTCTCTCCAGCTTCACTTGTGACAGGACCCTGTGTCAGGAAGACTATG
GGTTCTTCCGCGCCATCAGCCTGTGGCCCCCACTGGTGTGATCGGAATCTATGCCACAGCGCTCTCAGCGTCCA
TGAGCTCGCTCATTGGTGCCTCCCGCATCCTCCATGCCCTGGCCCGGGATGACCTCTTGGCGTGATCTTGGCAC
CGGCCAAGGTTGTGTCCCGAGGGGGAAACCCCTGGGCAGCTGTACTTTATTCTTGGGGCCTGGTGCAGCTGGTGC
TCCTGGCTGGGAAGCTGAACACACTGGCTGCTGTGGTCACTGTCTTCTACCTGGTGGCCTATGCTGCCGTGGACC
TGTCCTGCCTGAGCCTGGAGTGGGCCTCGGCCCCCAACTTCGCCCCACCTTCAGCCTGTTCTCTGCCACACCT
GCCTGCTGGGGGTGGCCTCCTGCCTGCTCATGATGTTCTCATCAGTCTTGCGCGGCTGGTGGCTCCCTGCTCC
TCATGGGTCTGCTGGCTGCCCTGCTCACCGCGCGAGGAGGCCAGTAGCTGGGGCTATGTACGCCAGGCCTTGC
TTTTCCACCAGGTGCGTAAGTATCTGCTTCGGCTGGAGCTCCGGAAGGATCACGTGAAGTTCTGGCGGCCCCAGC
TGCTGCTCCTGGTGGGGAACCCCCGGGGCGCCCTGCTCTGCTGCGGTTGGCCAACCAGCTTAAGAAGGGGGGGC
TGATGTGCTGGGCCACGTACCCCTGGGAGACCTCGACTCCCTGCCCTCGGACCCTGTACAGCCGAGTATGGGG
CATGGCTCAGCCTGGTGGACCGTGCCAGGTGAAGGCTTTTGTGGATCTAACCTCTCACCTCCGTGCGCCAGG
GGGCTCAGCATCTGCTGCGAATCTCCGGCCTCGGTGGCATGAAGCCCAACACGTTGGTCTAGGTTTCTACGATG
ACGCTCCACCGCAGGACCATTTCTGACGGACCCGGCTTTCTCTGAGCCTGCAGACAGCACCAGGGAGGGCAGTT
CCCCAGCTCTGAGCACCTGTTCCCTCCTCCCGGGCTCCTGGGAGCCCCCGGGCCCTCAATCCCCAGGACTATG
TGGCCACGGTGGCCGACGCCCTCAAGATGAACAAGAATGTGGTGTGCGCCGGGCCAGCGGGGCCCTTGCCCCCTG
AGCGGCTGAGCCGGGGGTCTGGGGGCACCTCTCAGCTGCACCATGTGGACGTGTGGCCCTCAACCTGCTGCGGC
CCCGGGGTGGGCCCCGCTATGTGGATGTCTGCGGCCTCTTCTGCTGCAGATGGCAACCATCTTGGGCATGGTGC
CCGCTTGGCATAGCGCCCGGCTCCGGATCTTCTGTGCTGCGGCCTCGGGAGGCGCCTGGGGCGGCCGAGGGGC
GGCTGCGGGCACTGCTGAGCCAACCTGAGGATCCGGGCTGAGGTGCAGGAGGTGGTGTGGGGCGAGGGGGCCGGG
CTGGGGAACCCGAGGCGGAGGAGGAAGGGGACTTTGTGAACAGTGGGCGGGGAGACGCAGAGGCAGAGGCCCTGG
CACGCAGCGCCAACGCCCTGGTTCGGGCCCAGCAGGGGCGCGGCACAGGAGGAGGGCCGGGTGGGCCGAGGGTG
GGGATGCTGAGGGCCCCATCACAGCCCTCACCTTCTGTACTTGCCTCGGCCGCCAGCCGATCCCGCCCCGATACC
CCCCTACCTGGCGCTACTGGAGACTCTAACCCGAGACCTGGGCCCCACGCTGCTGGTTTATGGGGTCACTCCAG
TCACCTGCACTGATCTGTGATGCCCCCTGCCTCCAGGGCTAGGTAGAGAGGGCCAGGCAGGCGGCCTATCCTGAT
CCTTGGAGGAGGAGGAAGAGGAGGCCACTGTGGCCCGTGGCCCTGCCCTTGGGACGTGGAGCCAGGGGAGGTTT
GAAGGGGATCCTGGGCTTGGGCATCACGCCACCTCCTTTGGCAGAGGGACCCAGCACACTAACTCTGGGTGGC
TGTCCCCACCGTGCAGGGGAGGGAGTCCGCAGCCTCCCTTCACTGGTGCCTTGTGCTAGGGGCCAGGCCTCCTC
TGTGACTCTGGGCTACCTCAGTTTCCCATTTTGGCCAGACTACCGGCCCACTGGGGTGGTGTGATGTTTTCTGTT
TGTTTTATTTTTCTAACTCTGCTGACCATGAATAAAAGACCAAAACAC

WO 2004/030615

PCT/US2003/028547

2532/6881
FIGURE 2326

GCGCGGGCAGGGCCGCACGAGCTGGCTGGCTGCTTGCACCCACATCCTTCTTTCTCTGGGACCTGGGGTCGCGGT
TACTTGGGCTGGCCGGCGAACCCTTGAGTGGCCTGGCGGGGAGCGGGCCTCGCGCGCCTGGAGGGCCCTGTGGAA
CGAAGAGAGGCACACAGCATGGCAGAAAACCGAGAGCCCCGCGGTGCTGTGGAGGCTGAACTGGATCCAGTGGAA
TACACCCTTAGGAAAAGGCTTCCCAGCCGCTTGCCCCGGAGACCCAATGACATTTATGTCAACATGAAGACGGAC
TTTAAGGCCCAGCTGGCCCGCTGCCAGAAGCTGCTGGACGGAGGGGCCCGGGGTCAGAACGCGTGCTCTGAGATC
TACATTACGGCTTGGGCCCTGGCCATCAACCACGCCATCAACATCGCGCTGCAGCTGCAGGCGGGCAGCTTCGGG
TCCTTGCAAGGTGGCTGCCAATACCTCCACCGTGGAGCTTGTTGATGAGCTGGAGCCAGAGACCGACACAAGGGAG
CCACTGACTCGGATCCGCAACAACCTCAGCCATCCACATCCGAGTCTTCAGGGTCACACCCAAGTAAATTGAAAAGA
CACTCCTCCACTTATCCCCTCCGTGATATGGCTCTTCGCATGCTGAGTACTGGACCTCGGACCAGAGCCATGTAA
GAAAAGGCCTGTTCCCTGGAAGCCCAAAGGACTCTGCATTGAGGGTGGGGGTAATTGTCTCTTGGTGGCCCAGTT
AGTGGGCCTTCCTGAGTGTGTGTATGCGGTCTGTAACATTGCCATATAAATAAAAAATCCTGTTGCACTAGTGT
CCTGCCAAA

WO 2004/030615

PCT/US2003/028547

2533/6881
FIGURE 2327

MAENREPRGAVEAELDPVEYTLRKRLPSRLPRRPNDIYVNMKTDFKAQLARCQKLLDGGARGQNACSEIYIHGLG
LAINHAINIALQLQAGSFGSLQVAANTSTVELVDELEPETDTREPLTRIRNNSAIHIRVFRVTPK

WO 2004/030615

PCT/US2003/028547

2534/6881

FIGURE 2328

GGAGGAAGACAGCGCCGCCGCGCACCGCCAGCGACCTCCGCCGAGAGTCCCACCGCCACAGGCCTCGGGCCAG
CGGCCAGGAGCTGCCTCCCCAGCCCCGTCGCCGCGGCCCCAGCCGCCCCCAACCTGCCCCACGGGCCCCGGCG
CCATGAGTGAGCTGGAGCAACTGAGACAGGAGGCCGAGCAGCTCCGGAACCAGATCCGGGATGCCCGAAAAGCAT
GTGGGGACTCAACACTGACCCAGATCACAGCTGGGCTGGACCCAGTGGGGAGAATCCAGATGAGGACCCGGAGGA
CCCTCCGTGGGCACCTGGCAAAGATCTATGCCATGCACCTGGGGGACCGACTCAAGGCTGCTGGTCAGCGCCTCCC
AGGATGGGAAGCTCATCATCTGGGACAGCTACACCACCAACAAGGTCCACGCCATCCCGCTGCGCTCCTCCTGGG
TAATGACCTGTGCCTACGCGCCCTCAGGGAACCTTTGTGGCCTGTGGGGGGTTGGACAACATCTGCTCCATCTACA
GCCTCAAGACCCGCGAGGGCAACGTCAGGGTCAGCCGGGAGCTGCCTGGCCACACTGGGTACCTGTCTGTGTTGCC
GCTTCCTGGATGACAACCAATCATCACCAGCTCTGGGGATACCACCTGTGCCCTGTGGGACATTGAGACAGGCC
AGCAGACAGTGGGTTTTGCTGGACACAGTGGGGATGTGATGTCCCTGTCCCTGGCCCCCGATGGCCGCACGTTTG
TGTGAGGCGCCTGTGATGCCTCTATCAAGCTGTGGGACGTGCGGGATTCCATGTGCCGACAGACCTTCATCGGCC
ATGAATCCGACATCAATGCAGTGGCTTTCTTCCCCAACGGCTACGCCTTCACCACCGGCTCTGACGACGCCACGT
GCCGCCTCTTCGACCTGCGGGCCGATCAGGAGCTCCTCATGTACTCCCATGACAACATCATCTGTGGCATCACCT
CTGTTGCCTTCTCGCGCAGCGGACGGCTGCTGCTCGCTGGCTACGACGACTTCAACTGCAACATCTGGGATGCCA
TGAAGGGCGACCGTGACAGGAGTCCCTCGCTGGCCACGACAACCGCGTGAGCTGCCTCGGGGTACCGACGATGGCA
TGGCTGTGGCCACGGGCTCCTGGGACTCCTTCTCAAGATCTGGAATAATGGCCCCACCCCACTGGGCCCAGG
CCAGGAGGGGCCCTGCCCCATGCCACACTACAGGCCAGGGCTGCGGGGCTGGCGCAATCCCAGCCCCCTTCCCCG
GGCCACGGGGCCTTGGGTCCCTGCCCTCCCACCCAGGTTTGGTTTCTCCCGGGGCCCCCACTGTGGAGATAAGAA
GGGGATGGAATGGGGGAAGAGGAGGAGCAGGAGGCCCTCATCCTTCTGCTGCCCTGGGGTTGGGGCCTCACCCT
CTGGAGGGCCGGAGGCAGGAGGTGGAAACCCAGGGGCTGGCTTTTTTAAACTGGTTTTATTTTAAATTTTTATT
ATATTTTCAGTTTTTTCATAAAGGAGCCAATTCCAACCTCTGT

WO 2004/030615

PCT/US2003/028547

2535/6881
FIGURE 2329

ATCCTGCTGCTGCCGCCACCGCTGCTGCTGCTCTGCAAAATTACAGCTGCTGCCTCTGTCTTGAGGACCCCAGCGC
CTTTCCCCCGGGGCCATGCTGCCTGCAGCCACAGCCTCCCTCCTGGGGCCCCCTCCTCACTGCCTGCGCCCTGCTG
CCTTTTGGCCAGGGCCAGACCCCCAACTACACCAGACCCGTGTTCTGTGCGGAGGGGATGTGAAGGGGGAATCA
GGTTACGTGGCAAGTGAGGGGTTCCCCAACCTCTACCCCCCTAATAAGGAGTGCATCTGGACCATAACGGTCCCC
GAGGGCCAGACTGTGTCCCTCTCATTCCGAGTCTTCGACCTGGAGCTGCACCCCGCCTGCCGCTACGATGCTCTG
GAGGTCTTCGCTGGGTCTGGGACTTCGGGCCAGCGGCTCGGACGCTTTTGTGGGACCTTCCGGCCTGCGCCCCCTA
GTCGCCCCCGGCAACCAGGTGACCCTGAGGATGACGACGGATGAGGGCACAGGAGGACGAGGCTTCTGTCTCTGG
TACAGCGGGCGGGCCACCTCGGGCACTGAGCACCAATTTTTCGGGGGGCGGCTGGAGAAGGGCCAGGGAACCCCTG
ACCACGCCCCAACTGGCCCGAGTCCGATTACCCCCCGGGCATCAGCTGTTCTTGGCACATCATCGCGCCCCCGGAC
CAGGTTCATCGCGCTGACCTTCGAGAAGTTTGACCTGGAGCCGGACACCTACTGCCGCTATGACTCGGTTCAGCGTG
TTCAACGGAGCCGTGAGCGACGACTCCCGGAGGCTGGGGAAGTTCTGCGGCGACGCAGTCCCGGGCTCCATCTCC
TCCGAAGGGAATGAACCTCCTCGTCCAGTTTCGTCTCAGATCTCAGTGTACCGCTGATGGCTTCTCAGCCTCCTAC
AAGACCCTGCCGCGGGGCACTGCCAAAGAAGGGCAAGGGCCCCGCCCCAAACGGGGAACTGAGCCTAAAGTCAAG
CTGCCCCCAAGTCCCAACCTCCGGAGAAAACAGAGGAATCTCCTTCAGCCCCCTGATGCACCCACCTGCCCAAAG
CAGTGCCGCGGACAGGCACCTTGACAGCAACTTCTGTGCCAGCAGCCTTGTGGTGACTGCGACAGTGAAGTCC
ATGGTTTCGGGAGCCAGGGGAGGGCCTTGCCGTGACTGTCAGTCTTATTGGTGCTTATAAACTGGAGGACTGGAC
CTGCCTTCTCCACCCACTGGTGCCTCCCTGAAGTTTTACGTGCCTTGCAAGCAGTGCCCCCCCATGAAGAAAGGA
GTCAGTTATCTGCTGATGGGCCAGGTAGAAGAGAACAGAGGCCCGTCTCCTCCAGAGAGCTTTGTGGTTCTC
CACCGGCCCAACCAGGACCAGATCCTCACCAACCTAAGCAAGAGGAAGTGCCCCCTCTAACCTGTGCGGGCTGCT
GCGTCCCAGGACTGAGACGCAGGCCAGCCCCGGCCCCCTAGCCCTCAGGCCTTCTTTCTTATCCAAATAAATGTTT
CTTAATGA

WO 2004/030615

PCT/US2003/028547

2536/6881
FIGURE 2330

MLPAATASLLGPLLTTACALLPFAQGQTPNYTRPVFLCGGDVKGESGYVASEGFNLYPPNKECIWTITVPEGQTV
SLSFRVFDLELHPACRYDALEVFAAGSGTSGQRLGRFCGTFRPAPLVAPGNQVTLRMTTDEGTGGRGFLWYSGRA
TSGTEHQFCGGRLEKAQGTLTTPNWPESDYPPGISCSWHIIAPPDQVIALTFEKFDLEPDITYCRYDSVSVFNGAV
SDDSRRLGKFCGDAVPGSISSEGNELLVQFVSDLSVTADGFSASYKTLPRGTAKGQGP GPKRGTEPKVKLPKPS
QPPEKTEESPSAPDAPTCPKQCRRTGTLQSNFCASSLVVTATVKSMVREPGEGLAVTVSLIGAYKTGGDLPSPP
TGASLKFYVPCKQCPPMKKGVSYLLMGQVEENRGPVLPPEFVVLHRPNQDQILTNLSKRKCP SQPVRAAASQD

WO 2004/030615

PCT/US2003/028547

2537/6881
FIGURE 2331

GGAGAGGCAGAGACCCAGGGGAGCCGAGGAGCGGAGACACGGACCCAGCAGGGTCACGCGGGAGGAGACTCGGGA
 CACCCACTCGCTGGCTGCCACCGGGAGCAGAGGGGGGCTCGGCCGCCCCCTCCCACATCAGTCTCCAGACCCCTTG
 GGGCTTCAGAGGCCGCTCCTAGGCTCCTCGGAGGAGGCGCGGGTTTCTTCTTTTCCGGAGAGCAAACCTTCTCTCG
 GAGATGCCTGGCAGGATGAGCCGCGGCCCGGAGAGGACGGGACAGCCTCTGATCGCCGCTGCGTGCCCCGCC
 ACTGCCCATGGCCAGGAGGCCCCAGGGAACGGACAGCCCGACCTCTTAGGCGCCGGGACCCCTCAGGCTCAGATCA
 GTGGCCGAGGGCCCCAGAGTTTGCAAACCTCAGCTCTGGAGTTCAGCAGCAACAGCAGCAGGAAAAACCTGCCCCCTG
 CTCCCCCTCCCGCCACCTCCCTCTCCTCTTCTCCCCCTACCCAGCAGGCACCCCCGGTTCCCGCCAGGGCCCTC
 CTGCCATGTGCGACCCAGACGTCCCCAGGGGCTCGGATGTCCCCGCCATGTGGCCCCCTTGTTCCAGGGGTGCCCT
 GAGCCCCCTTCAAGGAGCCCCAACCCACCCCAACCTTGCCCCAGCCCTGAGCCCCAGGGACCATGAGCGGGGGCA
 AGAAGAAGAGTAGTTTCAAATCACCAGCGTCACCACGGACTATGAGGGCCCTGGGAGCCCCAGGGGCTTCGGATC
 CCCCTACCCACAGCCCCCAACCGGGCCCCCGCCCCGCTGCCCAATGGGGAGCCCAGCCCCGATCCGGGGGGCA
 AGGGCACCCCCCGGAATGGCTCCCCACCACCTGGGGCCCCCTTCTCCCCGTTTCCGGGTGGTGAAGTGCCCCACG
 GCCTGGGAGAGCCTTATCGCCGCGGTGCTGAGCGTGTGTGGATGTTTATGAGCGAGACCTGGAGCCCCACAGCT
 TCGGCGGACTCCTGGAGGGAATTCGAGGGGCCTCAGGGGGCGCCGGGGGCAGATCTTGGATTCCAGGTTGGAGC
 TGGCCAGCCTCGGCCTGGGCGCCCCACCCACCGTCAGGCCTGTCTCAGGGCCCCACCTCCTGGCTCCGTCCAC
 CCCCCACCTCTCCTGGACCTCAGGCCCGCTCCTTCACTGGGGGACTGGGCCAGCTGGTGGTGCCCAGCAAAGCCA
 AGGCAGAGAAACCCCCACTGTGCGCCTCCTCACCACAGCAGCGCCCCCAGAGCCTGAGACCGGTGAGAGTGCGG
 GCACATCCCGGGCTGCCACGCCCTGCCCTCTCTGAGGGTGGAAGCGGAGGCTGGGGGCTCAGGGGCCAGGACCC
 CTCCACTGTCCCGGAGGAAAGCTGTAGACATGCGGCTGCGGATGGAGTTGGGTGCTCCAGAAGAGATGGGGCAGG
 TGCCCCCACTTGACTCTCGCCCCAGCTCCCCAGCCCTCTACTTACCCACGATGCCAGCCTGGTTCACAAATCTC
 CAGACCCCTTCGGAGCAGTAGCAGCTCAGAAGTTCAGCCTGGCCCACTCCATGTTGGCCATCAGTGGTCACCTAG
 ACAGCGACGATGATAGTGGCTCCGGAAGCCTGGTTGGCATTGACAACAAAATCGAGCAAGCCATGGACTTGGTGA
 AGTCCACCTCATGTTTGCGGTCCGGGAGGAGGTGGAGGTGCTGAAGGAGCAGATCCGGGAACCTGGCGGAGCGGA
 ACGCTGCGCTGGAGCAGGAGAATGGGCTGCTGCGCGCCCTGGCCAGCCCGGAGCAGCTGGCTCAGCTGCCCTCCT
 CGGGGGTCCCACGGCTTGGGCCCCCTGCGCCCAATGGGCCCTCCGTCTGAGCCTCCCTTCCCTTACAAATGTGCCT
 TTGGGGCTGCCCCGGCCTTGCGTCAGCCGCCTGCCCCCTCTTCTATGCAGCTTTAATGTCCCCGTGTCCCCGGGG
 TGGGAGTTCAAGGCTCAGTAATGGCCTGGTCCCCGGCCCCCTGCCCCATCTCCTCATCATCCCCAGCCTTGATGG
 AGGAGGGAGGGCTTCAGGACGGGGCGTCAGAGGGAGCCCCCTCTGGGAGGGAACCAACCCCCACCCTCCCTCCTG
 GGACCCCCCAGCAGTAGACGGCTTGGGGGAGTCGGAGGCTCCCCGGCAGACACCCACCCCCATCTTGTTCCCTT
 GAGGTGCCTCCTCTCCTCTGCCAGGGGAGGGAGTGTGGACAGTATCTGGAAGTTCTGGGATTGAGGTTGTTATT
 AAAATAATAATAATAATTAAAACTCTGAAGAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2538/6881

FIGURE 2332

MSGGKKKSSFQITSVTTDYEGPGSPGASDPPTPQPPTGPPPRLPNGEPSPDPGGKGTPRNGSPPPGAPSSRFRVV
KLPHGLGEPYRRGRWTCVDVYERDLEPHSFGLLEGIRGASGGAGGRSLDSRLELASLGLGAPTPPSGLSQGPTS
WLRPPPTSPGPQARSFTGGLGQLVVPSKAKAEKPPLSASSPQQRPEPETGESAGTSRAATPLPSLRVEAEAGGS
GARTPPLSRRKAVDMRLRMELGAPEEMGQVPPPLDSRPSSPALYFTHDASLVHKSPDPFGAVAAQKFSLAHSMIAI
SGHLDSDDDSGSGSLVGIDNKIEQAMD LVKSHLMFAVREEVEVLKEQIRELAERNAALEQENGLLRALASPEQLA
QLPSSGVPRLGPPAPNGPSV

WO 2004/030615

PCT/US2003/028547

2539/6881
FIGURE 2333

ATTTAAACTCCCAGAGCCGTTAAGTTGGTTCGTAGTCTGATGCGCGCGCAACCAGGGTGGTGGCGGAGTGCGCAT
GCGTGGTTCCGGGGCGAAGGGAACGCGCGCTCACCGTGCGCGCTCGCGGCCGGGTGGTAGTGGCGGAGGAGAAAAG
GGGTCCGGCGCACGCGCGGTTGAGTCCTCGAGTAGTTCCGGTCTCGCGGGCCTCTTGTTTTGGTCTCGCGGGCTAG
TAGGGCGCACTTGGCGGGGAGGCGCTTGGGCGCGAGACTAGGCGTGAAGAGCAGAGCTGCGCGCGCACTCGGGAA
AGGGGGGAAGGGAGCAGGGTCCAGGCAGGGGGGGTTAGGCCCCCTGATCCCCCTCGTTACCCCGACTGGCACGGA
ATAAGGGGAGGAAATGATCGAGATGGCGGCGGAGAAGGAGCCGTTTCTGGTGCCGGCCCCGCCGCCGCTCAA
AGATGAGTCCGGCGGAGGGGGCGGCCCCACGGTGCCACCGCACCAAGAGGCCGCTCTGGGGAGCTCCGCGGCGG
GACGGAGCGTGGTCCGGGTCGTTGCGCGCCATCTGCGGGGTCCCCAGCCGCTGCGGTCCGTCCGGAAAGCCCCGG
GGCCGCGGCCACCTCCTCCAGTGGTCCCAGGCGCAGCAGCACCAGGGGGGCGGCCCCCAGGCGCAGTCGCATGG
GGAGGCCCCGCTGTCCGATCCCCGGGGCGAGCCGCTCCCCCGACGTGGGGGAGGAGCGCCGGGGAGGGGGCGG
GACAGAGCTGGGTCCCCCTGCTCCTCCTCGACCCCGCAATGGCTATCAGCCCCACCGGCCACCTGGGGGGGGCGG
GGGCAAGAGGAGAAATAGCTGTAATGTAGGGGGAGGCGGGGGAGGCTTCAAACATCCGGCCTTCAAGAGGCGCAG
GCGGGTGAATTCCGACTGTGACTCTGTGTTACCTTCCAACCTCCTCCTGGGGGGCAATATCTTTGATCCCCTGAA
CCTGAATAGCCTCCTGGATGAGGAAGTGAGCCGCACTCTCAACGCGGAGACCCCTAAGTCATCCCCCTTCCGGC
CAAAGGGCGAGATCCGGTGGAGATCCTCATCCCCAAAGATATTACTGACCCGCTCAGTCTCAATACTTGCACTGA
TGAGGGCCATGTAGTTCTTGCTTCGCCACTCAAGACTGGTCGGAAGCGGCATAGACACCGGGGACAGCACCACCA
GCAGCAGCAGGCAGCCGGAGGGAGTGAGAGCCACCCCGTGCCGCCACAGCCCTCTCACCCCTTACTCCACGG
GGAGGGCGCCTCACAGCAGCCGCGGCACAGGGGCCAGAACC GGATGCCCCCAACCCTATGAACCTCAACACAGC
CATCAACTGCAGGGATGAAGTGGTGTCTCCCCTTCCATCTGCTCTGCAGGGTCCCTCAGGCTCCCTATCAGCCC
TCCAGCTGCCTCAGTTATCTCTGCACCCCCATCTTCTCCTCCCGACATCGCAAACGTGCGCAGGACTTCCAGCAA
GTCCGAGGCAGGGGCTAGGGGTGGAGGCCAGGGTTCCAAGGAAAAGGGCCGAGGGAGTTGGGGAGGCCGCCACCA
CCACCACCACCCACTGCCTGCAGCAGGCTTCAAAAAGCAACAGCGCAAGTTCCAGTATGGGAATTATTGCAAATA
CTATGGGTACCGCAATCCTTCTGTGAGGATGGGCGCCTTCGGGTGTTGAAGCCTGAGTGGTTTTCGGGGCCGGGA
CGTCTAGATCTGGGCTGCAATGTGGGCCATCTGACCTGAGCATTGCCTGCAAGTGGGGCCCGTCCCGCATGGT
GGGCTGGATATCGATTCCCGGCTCATCCATTCTGCCCGCCAAAACATCCGACACTACCTTTCCGAGGAGCTGCG
TCTCCACCCCAAGACTTTGGAAGGGGACCCGGGGGCGAGGGGTGAGGAAGGGACCACCACCGTTTCAAAGAGGAG
CTGCTTCCCAGCCTCGCTGACTGCCAGCCGGGTCCCATCGCTGCCCCCAAGTGCCCTTGGATGGAGCGGACAC
ATCAGTCTTCCCCAACAAATGTTGTCTTCTGTCACGGTAATTATGTGCTGGATCGAGATGACCTGGTGGAGGCCCA
AACACCTGAGTATGATGTGGTGTCTGCCTCAGCCTCACCAAGTGGGTGCATCTGAACTGGGGAGACGAGGGCCT
GAAGCGCATGTTTCGCCGGATCTACCGGCACCTACGCCCTGGGGGCATCCTGGTCTAGAGCCCCAACCCCTGGTC
GTCGTATGGCAAGAGAAAGACTCTTACAGAAACGATCTACAAGAACTACTACCGAATCCAATTGAAGCCAGAGCA
GTTTCACTTCTACCTGACATCCCCAGACGTGGGCTTCTCCAGCTATGAGCTTGTGGCCACACCCCAACACCTC
TAAAGGCTTCCAGCGTCTGTGTACCTGTTCCACAAGGCCCGATCCCCAGCCACTAAGTGGCCCCCTAAACAGA
AAGTGTGAAGAGGCTGCCCTCGCTGCTCATAAGGACCTGGGGGAAGAGGAAAGTGTCCCAAGGTCTTTCTTTCT
GACTCCAAAAATAGTTTCTTTCTTGGATCTGCAAAGAAAGCTTTTCTTCCGTGCTGCCTCAGCCTCCTCCCTA
TGCTCTGGCACCTGCGCAGCAAGGCTGGCTGTGCTGGAGTCACCATCATCTTCTCTCCCCAGCCTCCCAGGC
TGGATGGCATGGACTGTTTGCTGACCTCTGTTCTCTTAGGGCATGGGAGGTGGGAGGATATCAAATCTCTAGCC
CTTTCTCTCTATTCTCTAGCCCTTCTATTCTCCCAAGGAGAGAGATTCCCATTTCTCCTCGGCCATTGTACCTAG
CTCTTGTCCCTAGCTGCATTTTCACTGGACCATGGATAGAGGGACTGAGGGTTAGACGGAGAAGACTGGCAGGGAG
GCACGCAGGTACTGTGAAAAATCCTTCCCTTTGCCCTCCCCAGTGAGGAGGGGGTGGGTTTTCAATGTGAGAA
CAGCACAATAAACTTGATGTCTAGGGCAGTGGCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

WO 2004/030615

PCT/US2003/028547

2540/6881
FIGURE 2334

MVGLDIDSRLIHSARQNI RHYLSEELRLPPQTLEGDPGAEGEEGTTTVRKRS CF PASLTASRGPIAAPQVPLDGA
DTSVFPNNVVFVTGNYVLD RDDLVEAQTPEYDVVLCLSLTKWVHLN WGDEGLKRMFRR IYRHLP GGILVLEPQP
WSSYGKRKTLTETIYKNYRIQLKPEQFSSYL TSPDVGFSSYELVATPHNTSKGFQRPVYLFHKARSPSH

WO 2004/030615

PCT/US2003/028547

2541/6881
FIGURE 2335

GGCACGAGGGGAAGTGGCTGTTTGGCTGCTGACAACATGAAGACTTCCTGCGATGAGAACAGAGGCACAGGTGCC
GGCCCTGCAGCCCCCAGAACCTGGACTGGAGGGGGCCATGGGGCACCAGGACCTGGTCCTGCCCTGGGTGCTGCT
GACCTTGTGTGTCACTGCGGGGACCCCGAGGTGTGGGTTCAAGTTCGGATGGAGGCCACCGAGCTCTCGTCCTT
CACCATCCGTTGTGGGTTCCCTGGGGTCTGGCTCCATCTCCCTGGTGACTGTGAGCTGGGGGGGCCCCGACGGTG
TGGGGGGACCACGCTGGCTGTGTTGCACCCAGAACGTGGCATCCGGCAATGGGCCCCCTGCTCGCCAGGCCCGCTG
GGAAACCCAGAGCAGCATCTCTCTCATCCTGGAAGGCTCTGGGGCCAGCAGCCCCCTGCGCCAACACCACCTTCTG
CTGCAAGTTTGCCTCTCCCTGAGGGCTCCTGGGAGGCCTGTGGGAGCCCTCCCGCCCAGCTCAGACCCAGGGCT
CTCTGCCCCGCCGACTCCTGCCCCCATTCTGCGGGCAGACCTGGCCGGGATCTTGGGGGTCTCAGGAGTCCTCCT
CTTTGGCTGTGTCTACCTCCTTCATCTGCTGCGCCGACATAAGCACCAGCCCTGCCCCCTAGGCTCCAGCCGTCCCG
CACCAGCCCCCAGGCACCGAGAGCACGAGCATGGGCACCAAGCCAGGCCTCCCAGGCTGCTCTTCACGTCCCTTA
TGCCACTATCAACACCAGCTGCCGCCAGCTACTTTGGACACAGCTCACCCCCATGGGGGGCCGTCTGGTGGGC
GTCACTCCCCACCCACGCTGCACACCGGCCCCAGGGCCCTGCCGCCTGGGCCTCCACACCCATCCCTGCACGTGG
CAGCTTTGTCTCTGTTGAGAAATGGACTCTACGCTCAGGCAGGGGAGAGGCCTCCTCAGCTGGTCCCGGCCTCAC
TCTTTTCCCTGACCCCTCGGGGGCCAGGGCCATGGAAGGACCCTTAGGAGTTCGATGAGAGAGACCATGAGGCCA
CTGGGCTTTCCCCCTCCCAGGCCTCCTGGGTGTCATCCCCTTACTTTAATCTTGGGCCTCCAATAAGTGTCCCA
TAGGTGTCTGGCCAGGCCACCTGCTGCGGATGTGGTCTGTGTGCGTGTGTGGGCACAGGTGTGAGTGTGTGAGT
GACAGTTACCCCATTCAGTCATTTCTGCTGCAACTAAGTCAGCAACACAGTTTCTCTGAAAAAAAAAAAAAA
AAAA

WO 2004/030615

PCT/US2003/028547

2542/6881
FIGURE 2336

MRTEAQVPALQPPEPGLEGAMGHRTLVLWPVLLTLCVTAGTPEVWVQVRMEATELSSFTIRCGFLGSGSISLVTV
SWGGPDGAGGTTLAVLHPERGIRQWAPARQARWETQSSI SLILEGSGASSPCANTTFCCKFASFPEGSWEACGSL
PPSSDPGLSAPPTPAPILRADLAGILGVSGVLLFGCVYLLHLLRRHKHRPAPRLQPSRTSPQAPRARAWAPSQAS
QAALHVPYATINTSCRPATLDTAHPHGGPSWWASLPTHAAHRPQGPAAWASTPIPARGSFVSVENGLYAQAGERP
PHTGPGLTLFPDPRGPRAMEGPLGVR

WO 2004/030615

PCT/US2003/028547

2543/6881
FIGURE 2337

AAGGGTCTAGGATACAGTCTTTGTAGATGAGCGGGTCCCCCTTGGAGGACAGAATGAAGAATTGGGAAATCATGG
CCGTTCTGGAGAGTAGACAAGAAGACGGCGAAAGTCGGGGCTGCCCCGCCCTGCGGCCCCGGAACAAAAGAACGC
GTGTGCGCTGGCCCTTTAAGAGCGATTCTCCTCCGCCCGCGCCAGCTCGGACCGCGGGAAACCCGGCGCCTGCAC
TACCCCGCCCCGAGATTCCCTTCCGACGCCCGCACCGCCTCCCCGTCACTCATTCTAGGCCCCGACGGTGATTGG
CTTGCGGCTAGCGGGAGGTGAAGAAGGCCGCTTGTCCGATTGGCCCCGACGACGAGTGGCGCCGGTCACGTGGGGG
GCGACGTTTCGCGCCAATTTGCGTTGGCCGGCCACAGTCCACCGCGCGGAGATTCTCAGCTTCCCCAGGAGCAAG
ACCTCTGAGCCCCGCAAGCGCGGCCGACGGCCCTCGGCAGCGATGGCACTGAAGGACTACGCGCTAGAGAAGGA
AAAGGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATGATGAACTCGGGAAGAAGCAGTTCAAGTATGGGAACCA
GTTGGTTCCGGCTGGCTCATCGGGAACAGGTGGCTCTGTATGTGGACCTGGACGACGTAGCCGAGGATGACCCCGA
GTTGGTGGACTCAATTTGTGAGAATGCCAGGCGCTACGCGAAGCTCTTTGCTGATGCCGTACAAGAGCTGCTGCC
TCAGTACAAGGAGAGGGAAGTGGTAAATAAAGATGTCCTGGACGTTTACATTGAGCATCGGCTAATGATGGAGCA
GCGGAGTCGGGACCCCTGGGATGGTCCGAAGCCCCAGAACCAAGTACCCTGCTGAACTCATGCGCAGATTGTGAGT
GGTCTCTGTGCGGAAAGATGTAGGGATTGGTCTCCAGGATCTTGTGTTGTGACTGTTTTCTCCCTTAGTGAGCT
GTATTTTCAAGGCCCTAGCAGCAACAAGCCTCGTGTGATCCGGGAAGTGCGGGCTGACTCTGTGGGGAAGTTGGT
AAGTGTGCGTGGAATCGTCACTCGTGTCTCTGAAGTCAAACCAAGATGGTGGTGGCCACTTACACTTGTGACCA
GTGTGGGGCAGAGACCTACCAGCCGATCCAGTCTCCCACTTTCATGCCTCTGATCATGTGCCAAGCCAGGAGTG
CCAAACCAACCGCTCAGGAGGGCGGCTGTATCTGCAGACACGGGGCTCCAGATTCAATAATTCCAGGAGATGAA
GATGCAAGAACATAGTGATCAGGTGCCGTGTGGGAAATATCCCTCGTAGTATCACGGTGCTGGTAGAAGGAGAGAA
CACAAGGATTGCCAGCCTGGAGACCAGTCAAGCTCACTGGTATTTTCTTGCCAATCCTGCGCACTGGGTTCGG
ACAGGTGGTACAGGGTTTACTCTCAGAAACCTACCTGGAAGCCCATCGGATTGTGAAGATGAACAAGAGTGAGGA
TGATGAGTCTGGGGCTGGAGAGCTCACCAGGGAGGAGCTGAGGCAAAATGCAGAGGAGGATTCTACGAAAAGCT
GGCAGCTTCAATCGCCCCAGAAATATACGGGCATGAAGATGTGAAGAAGGCACTGCTGCTCCTGCTAGTCGGGGG
TGTGGACAGTCTCCTCGAGGCATGAAAATCCGGGGCAACATCAACATCTGTCTGATGGGGGATCCTGGTGTGGC
CAAGTCTCAGTCTCTGTATACATTGATCGACTGGCGCCTCGCAGCCAGTACACAACAGGCCGGGGCTCCTCAGG
AGTGGGGCTTACGGCAGCTGTGCTGAGAGACTCCGTGAGTGGAGAAGTACCTTAGAGGGTGGGGCCCTGGTGCT
GGCTGACCAGGGTGTGTGCTGCATTGATGAGTTCGACAAGATGGCTGAGGCCGACCGCACAGCCATCCACGAGGT
CATGGAGCAGCAGACCATCTCCATTGCCAAGGCCGGCATTCTCACCACACTCAATGCCCCGCTGCTCCATCCTGGC
TGCCGCCAACCCTGCCTACGGGCGCTACAACCCTCGCCGCGAGCCTGGAGCAGAACATACAGCTACCTGCTGCACT
GCTCTCCCGGTTTGACCTCCTCTGGCTGATTCAAGGACCGGCCCGACCGAGACAATGACCTACGGTTGGCCAGCA
CATCACCTATGTGCACCAGCACAGCCGGCAGCCCCCTCCAGTTTGAACCTCTGGACATGAAGCTCATGAGGCG
TTACATAGCCATGTGCCGCGAGAAGCAGCCCATGGTGCCAGAGTCTCTGGCTGACTACATCACAGCAGCATACTG
GGAGATGAGGCGAGAGGCTTGGGCTAGTAAGGATGCCACCTATACTTCTGCCCCGACCCCTGCTGGCTATCCTGCG
CCTTCCACTGCTCTGGCACGTCTGAGAATGGTGGATGTGGTGGAGAAAGAAGATGTGAATGAAGCCATCAGGCT
AATGGAGATGTCAAAGGACTCTCTTCTAGGAGACAAGGGGCAGACAGCTAGGACTCAGAGACCAGCAGATGTGAT
ATTTGCCACCGTCCGTGAAGTGGTCTCAGGGGGCCGAAGTGTCCGGTCTCTGAGGCAGAGCAGCGCTGTGTATC
TCGTGGCTTACACCCCGCCAGTTCCAGGCGGCTCTGGATGAATATGAGGAGCTCAATGTCTGGCAGGTCAATGC
TTCCCGGACACGGATCACTTTTGTCTGATTCCAGCCTGCTTGCAACCCTGGGGTCTCTGTTCCCTGCTGGCCT
GCCCCCTGGGAAGGGGCAGTGATGCCTTTGAGGGGAAGGAGGAGCCCCCTCTTCTCCCATGCTGCACTTACTCCT
TTTGCTAATAAAAGTGTGTTGTAGATTGTCTCTTAGCCTGGGCCTGACTTCCATTAAACAGGGTTTTGTGCG
TTTTTTAGATTCTGTTCGTTTTTATGCTATTTTATCCACTCAGTAAATTACCTGAGTAAAGTGCATCTCCCTGC
CAGGCCCCAGTATAGACACTGGGGATGCGGCAAGGACTAAGCGGTCCCTGCTGTTTGGAGATACTTAAGATGGG
GCTCCACTTTTTGAGCCCCCGACTCCCT

WO 2004/030615

PCT/US2003/028547

2544/6881
FIGURE 2338

GGCACGAGGGGAAAATGGCGGCGGCGGCGGCGGCGGCTGCAGCTACGAACGGGACCGGAGGAAGCAGCGGGATGG
AGGTGGATGCAGCAGTAGTCCCCAGCGTGATGGCCTGCGGAGTGACTGGGAGTGTTTCCGTCGCTCTCCATCCCC
TTGTCATTCTCAACATCTCAGACCACTGGATCCGCATGCGCTCCCAGGAGGGGCGGCCTGTGCAGGTGATTGGGG
CTCTGATTGGCAAGCAGGAGGGCCGAAATATCGAGGTGATGAACTCCTTTGAGCTGCTGTCCCACACCGTGGAAG
AGAAGATTATCATTGACAAGGAATATTATTACACCAAGGAGGAGCAGTTTAAACAGGTGTTCAAGGAGCTGGAGT
TTCTGGGTGGTATACCACAGGGGGGCCACCTGACCCCTCGGACATCCACGTCCATAAGCAGGTGTGTGAGATCA
TCGAGAGCCCCCTCTTTCTGAAGTTGAACCCCTATGACCAAGCACACAGATCTTCTGTGACGCTTTTTGAGTCTG
TCATTGATATAATCAATGGAGAGGCCACAATGCTGTTTGCTGAGCTGACCTACACTCTGGCCACAGAGGAAGCGG
AACGCATTGGTGTAGACCACGTAGCCCGAATGACAGCAACAGGCAGTGGAGAGAACTCCACTGTGGCTGAACACC
TGATAGCACAGCACAGCGCCATCAAGATGCTGCACAGCCGCGTCAAGCTCATCTTGGAGTACGTCAAGGCCTCTG
AAGCGGGAGAGGTCCCCCTTAATCATGAGATCCTGCGGGAGGCCTATGCTCTGTGTCACTGTCTCCCGGTGCTCA
GCACAGACAAGTTCAAGACAGATTTTTATGATCAATGCAACGACGTGGGGCTCATGGCCTACCTCGGCACCATCA
CCAAAACGTGCAACACCATGAACCAGTTTGTGAACAAGTTCAATGTCCTCTACGACCGACAAGGCATCGGCAGGA
GAATGCGCGGGCTCTTTTTCTGATGAGGGTACTTGAAGGGCTGATGGACAGGGGTGAGGCAACTATCCCAAAGGG
GAGGGCACTACACTTCCTTGAGAGAAACCGCTGTCATTAATAAAAGGGGAGCAGCCCCTGAGCACCAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2545/6881
FIGURE 2339

MACGVTGSVSVALHPLVILNISDHWIRMRSQEGRPVQVIGALIGKQEGRNIEVMNSFELLSHTVEEKIIDKEYY
YTKEEQFKQVFKELEFLGWYTTGGPPDPSDIHVHKQVCEIIESPLFLKLNPMTKHTDLPVSVFESVIDIINGEAT
MLFAELTYTLATEEAERIGVDHVARMTATGSGENSTVAEHLIAQHSIAKMLHSRVKLILEYVKASEAGEVFPNHE
ILREAYALCHCLPVLSTDKFKTDFYDQCNDVGLMAYLGTITKTCNTMNQFVNKFNVLYDRQGIGRRMRGLFF

WO 2004/030615

PCT/US2003/028547

2546/6881
FIGURE 2340

GCTTCCGGCACGGGATGTTTTCGGTTGTTTGACCGAGAGAGTTGTAGGCGCAAAGCTGAGGAAAGGAGAGTGTGG
AGAGGGGCTTGGTGTGGTGGGGCCCGGTGTTTGGGACCGGAGGGTGTGACGGCTGATGAGTTCCCTTGGGTTTGC
TCTTTCTTCACCTGAAAAGAAGACTCCAGGAAGGGCAGCACATGCCGGAGAAAGATGAATTGCAGCTTGACCGCC
CAGAGGCGCGGCAGTGACGCCGAGTTGGGACCCTGGGTGATGGCTGCGAGGTCCAAGGACGCGGCGCCGTCCCAA
CGCGACGGACTTTTGGCCGTGAAAGTGGAGGAAGACTCACCCGGAAGTTGGGAGCCCAACTATCCCGCGGCTTCG
CCGGACCCCGAAACTTCTCGACTGCACTTTAGGCAGCTGCGTTACCAGGAGGTGGCTGGACCGGAAGAGGCGCTG
AGCCGGCTCCGAGAACTCTGTCGTCGGTGGCTGAGACCCGAGCTGCTCTCCAAGGAGCAGATCCTGGAGCTGCTG
GTGCTGGAGCAGTTCCCTACCATCCTGCCCGAGGAGCTTCAAGCCTGGGTGCGAGAGCACTGCCAGAGAGCGGG
GAGGAGGCGGTGGCCGTGGTGCGGGCTCTGCAGCGAGCGCTCGATGGAACCTCATCCAGGGGATGGTGACTTTC
GAGGACACGGCTGTGTCTTAACCTGGGAGGAGTGGGAGCGCCTGGACCCAGCACGGAGGGACTTCTGCAGAGAG
AGTGCGCAGAAGGATTCCGGGAGCACAGTTCCGCCGAGTTTGGAAGCAGAGTGGAGAACAAGAGTTGATTCCA
ATGCAACAAATTTTGAAGAAGCGGAGCCACAGGGGCAACTACAAGAAGCGTTCCAGGGGAAGCGCCCCCTGTTT
TCTAAGTGTGGCAGTACCCATGAGGACAGGGTGGAAAAGCAGTCCGGAGACCCCTTGCCCTGAAACTTGAAAA
TCTCCTGAAGCAGAAGGACTCAACAGCATCTCAGATGTCAATAAGAATGGTTCCATAGAAGGGGAAGACTCTAAA
AATAATGAATTGCAGAACAGTGCCAGGTGTTCCAACCTTGTTCTATGTCAGCACATCCCAGAGCAGAGAGGCC
ACTGACAGTGAGGAACACGGGAACAAGTGCAAGCAAAGTTTCCACATGGTGACGTGGCAGCTGCTGAAACCTCAC
AAGTCTGACAGTGAGGACAGTTTCCATCATTCCAGCCTTTTTGAGACCCAGAGGCAGCTCCATGAAGAAAGACCT
TATAAATGTGGTAACTGTGGGAAGAGTTTCAAACAACGCTCTGACCTCTTTAGACACCAGAGAATCCACACAGGT
GAGAAACCTTATGGCTGCCAAGAATGTGGGAAAAGCTTCAGCCAGAGTGCTGCCCTGACCAAGCACCAGAGGACA
CACACAGGCGAGAAGCCGTACACCTGTCTGAAATGTGGGGAGCGCTTCAGGCAGAATTCACACCTAAATCGTCAT
CAAAGTACCCACAGTAGAGACAAACATTTTAAATGTGAGGAATGCGGGGAAACCTGTCTATTTCCAACCTTTTT
AGACATCAGAGACTACATAAAGGGGAAAGACCCTATAAGTGTGAAGAATGCGAGAAGAGCTTCAAACAGCGCTCT
GACCTCTTTAAACACCACAGAATCCACACTGGGGAGAAGCCCTATGGATGTTCCGTCTGTGGGAAACGCTTCAAT
CAGAGTGCAACCTCATTAAACACCAGAGAATTCACACTGGGGAAAAGCCTTACAAATGTCTTGAATGTGGGGAA
AGATTTAGACAAAGTACACACCTTATCCGACACCAAAGAATTCATCAAAATAAAGTGCTGTCGGCTGGGCGTGGT
GGCTCACGCCTATTAATCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCATTGAGATCAGGAGTTTGAACCAG
CCTGGCCAACATGGTGAAATCTGTCTCTACTAAAAATACAAAAATGAGCCGGGCATGGTGGTGCATGCCTGTAA
GCCAGCTATTCGGGAGGCTGAGGTAGGAGAATCACTTGAACCCAGGAGCGGAAGTTGCAGTGAGCTGAGATCA
TGCCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAGAAATAAAGTGCTGTCATTTTGAT
ATGTT

WO 2004/030615

PCT/US2003/028547

2547/6881
FIGURE 2341

MNCSLTAQRRGSDAELGPWVMAARSKDAAPSQRDGLLPVKVEEDSPGSWEPNYPASPDPETSRLHFRQLRYQEV
AGPEEALSRLRELCRRWLRPELLSKEQILELLVLEQFLTILPEELQAWVREHCPESGEEAVAVVRALQRALDGTS
SQGMVTFEDTAVSLTWEERLDPARRDFCRESAQKDSGSTVPPSLESRVENKELIPMQQILEEAEPQGQLQEAF
QGKRPLFSKCGSTHEDRVEKQSGDPLPLKLENSPEAEGLNSISDVNKNKSIEGEDSKNNELQNSARCSNLVLCQH
IPKAERPTDSEEHGNKCKQSFHMVTWHVLKPHKSDSGDSFHHSSLFETQRQLHEERPYKCGNCGKSFKQRSDLFR
HQRHTGEKPYGCQECGKSFSQSAALTKHQRHTHTGEKPYTCLKCGERFRQNSHLNRHQSTHSRDKHFKCEECGET
CHISNLFRRHQLRHKGERPYKCEECEKSFKQRSDLFKHHRIHTGEKPYGCSVCGKRFNQSATLIKHQRHTGEKPY
KCLECGERFRQSTHLIRHQRHQNKVLSAGRGG SRL

WO 2004/030615

PCT/US2003/028547

2548/6881
FIGURE 2342

GGGCACAGCGGACACCAGGACTCCAAAATGCGCTCAGTTGGTGAGTGTCCGGCCCCAGTACCAGTGAAGGACAAG
AAACTTCTGGAGGTCAAAC TGGGGGAGCTGCCAAGCTGGATCTTGATGCGGGACTTCAGTCCTAGTGGCATTTC
GGAGCGTTTCAAAGAGGTTACTACCGGTACTACAACAAGTACATCAATGTGAAGAAGGGGAGCATCTCGGGGATT
ACCATGGTGCTGGCATGCTACGTGCTCTTTAGCTACTCCTTTTCCTACAAGCATCTCAAGCACGAGCGGCTCCGC
AAATACCACTGAAGAGGACACACTCTGCACCCCCCACCCACGACCTTGGCCCGAGCCCTCCGTGAGGAACAC
AATCTCAATCGTTGCTGAATCCTTTCATATCCTAATAGGAATTAACCTCCAAATAAAACATGACTGGTAAAAAA
AA

WO 2004/030615

PCT/US2003/028547

2549/6881
FIGURE 2343

MASVGECPAPVPVKDKKLEVKLGELPSWILMRDFSPSGIFGAFQRGYYRYYNKYINVKKGSISGITMVLACYVL
FSYSFSYKHLKHERLRKYH

WO 2004/030615

PCT/US2003/028547

2550/6881
FIGURE 2344

TCGCTCGCTCCTCCTTCGCTTCGCCTCGCCGCCGCCATGCAGGAAATCATCGCCAGCGTGGACCACATCAAGTTT
GACTTGGAGATCGCGGTGGAGCAGCAGCTGGGGGCGCAGCCGCTGCCCTTCCCCGGCATGGACAAGTCGGGCGCT
GCTGTCTGTGAATTCTTTTGAAGCTGCCTGCGGCAAAGGGGGCATGTGTCCGTTTCGCCACATCAGTGGTGAG
AAGACAGTTGTGTGCAAACACTGGCTGCGTGGCCTATGCAAGAAAGGGGACCAGTGTGAGTTCCTGCATGAGTAT
GACATGACCAAGATGCCCGAGTGCTACTTCTACTCCAAGTTCGGGGAGTGCAGCAACAAGGAATGTCCCTTCCTG
CACATCGACCCCGAGTCCAAGATCAAGGACTGTCCTTGGTATGACCGCGGCTTCTGCAAGCACGGTCCCCCTCTGC
AGGCACCGGCACACACGGAGAGTCATCTGTGTGAATTACCTCGTGGGATTCTGCCCCGAGGGGGCCCTCGTGTA
TTCATGCACCTTCGATTTGAACTGCCCATGGGAACACCGAGCAGCCCCCACTGCCACAGCAGACACAGCCTCCA
GCAAAGCAAAGTAACAATCCGCCATTACAAAGGTCGTCTCCTTGATCCAGTTAACGAGTCAGAACTCTTCTCCC
AATCAGCAGAGAACCCCGCAGGTCATCGGGGTTCATGCAGAGTCAAAACAGCAGCGCGGGCAACCGGGGACCCCGG
CCACTGGAGCAGGTCACCTGTTACAAGTGTGGCGAGAAAGGACACTACGCCAACAGATGCACCAAAGGGCACTTG
GCCTTTCTCAGTGGACAGTGACAGCAGCTGGAGCCAGCTCCGAGCAGCCCGGGGGCCCCGCTGTTGGGAGTGTGC
ATTTAACTGTTTCATGCGCTTGTGGCGCGACTGTGGCTCGAGCTGGCCCGCAGACACGTGGGTTTCATCACTCT
GAGGGGCCACGTCTGTAGTTTCCTATCATTTTGCCGTAGTATTTTTTGAAAAGGGACATGTGTCTGTGGGTC
CCTGCAGTCGACATCATGTTTGGCTGGGCATCGATGCCTCCTTTCTGGGACTCCCGGCACAACTCCCTCATCCA
GGGAGGGAGGCAGCTGCTGGGGAGGGGCTTGGCTAGGTAGTTCTGTGTGGCGGTGGTCATTCCCTCATTAAACA
CCAGTTCTTGGTGACGCCAGGGGCTGGTAGGTCAATCAAAGCTGTGGCCAGCTCACGCCTGCTTCCTCCCTCCCT
GCCCTGCTGAATCCTAAAGCTGTGCCTATATCTGTGATTTGAATGAGGGAGCCCTTTGGGGCAAATTCAGGTGCC
CCCATTGCCTCAGGCTGGCCCTGGTCCCAGGTGGCAGCGGTTGAGGAGGGGTACAGGGCTCTCAAGCCTGAGGTT
TTCTTCTCTGGGCTTAATTTTCTCTTGGGGTACGTGCCTGACAGTGTTTAAGGTGTCCGTTGAAGTGGAGTTGCA
GACTTTTAAATAGATGACCCCTTCAGATCATCTGTGCCTACCTCCTGCCCATCAGGCGTCTACACTGTCACTCAG
ACACCTGTGGCATGTGGAGGAGACTGCCCTGTCCTGAGCCTGGAAAATGTGAACTGTCTCCTGCAACCTGCTGG
GCATGTGGGCCTGGCTGTGTTCAATTGCAAGAACAATTTTATGAAATGGATTAAAGCTTGTTTTTT

WO 2004/030615

PCT/US2003/028547

2551/6881
FIGURE 2345

MQEIIASVDHIKFDLEIAVEQQQLGAQPLPFPMDKSGAAVCEFFLKAACGKGGMCPFRHISGEKTVVCKHWLRGL
CKKGDQCEFLHEYDMTKMPECYFYSKFGECSNKECPFLHIDPESKIKDCPWYDRGFCKHGPLCRHRHTRRVICVN
YLVGFCPEGPSCKFMHPRFELPMGTTEQPPLPQQTQPPAKQSNNPPLQRSSSLIQLTSQNSSPNQQRTTPQVIGVM
QSQNSSAGNRGPRPLEQVTCYKCGEKGHYANRCKGHLAFLSGQ

WO 2004/030615

PCT/US2003/028547

2552/6881
FIGURE 2346

CTGAGGCGGGAGACCGGTGGTCTGCACCGTCCTGGAGGGAGATATGAGTGGCTGGACTCTCAGCCAGCCACTGGG
ATGTGTTTCGGGCTTTGGACCTTGAGGCCGGAGAGAGCTCCCGAGAGGAGGCGGCGCCACGTTTCGTTCTTCTGAGG
GGACGGTAGATTTGGGGGTTTTCTCTAGGATTCTCGCGCCGTTTTCTCTGAAGAAACAGGACCAGAGAGGGAAG
GTGACCTGAAAGTCACAGAATAATTTTTTAGAGCTGAACAAGAATCCAAGCCTGCAACTGCAGAGACGAGAGATC
TTTCTGCTGTCTATACTCTTGAAAGCACATCCTAAGATCTTTGCAGATTATCCTGTGGAAGGAAAATGCCTAAA
GTCAAAGAAGCCGGAAAGCACCCCCAGATGGCTGGGAGTTGATTGAGCCAACACTGGATGAATTAGATCAAAAG
ATGAGAGAAGCTGAAACAGAACCGCATGAGGGAAAGAGGAAAGTGGAATCTCTGTGGCCCATCTTCAGGATCCAC
CACCAGAAAACCCGCTACATCTTCGACCTCTTTTACAAGCGGAAAGCCATCAGCAGAGXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXACAAAACCTGATTGCAAAATGGAAAAAGCAAGGATATGAGAACTTGTGCTGCCTG
CGGTGCATTTCAGACACGGGACACCAACTTCGGGACGAACTGCATCTGCCGCGTGCCCAAAAGCAAGCTGGAAGTG
GGCCGCATCATCGAGTGCACACACTGTGGCTGTCTGTGGCTGCTCTGGCTGAGGCTGGCGCGCTCCACCCTGGACT
CTGGACTTCGCAGGTTCTGCCTGTCACGCCACCCCTTCTGGGAGCAGCGAGCAGTGCCCCAGGCCCGAGTTG
GAGCACGGTCTCTATGGGGAAGGCTTCGCTGTCTATCAGCTGTGATTGTAAAAATAAAATCTTTAAATCTCTCG

WO 2004/030615

PCT/US2003/028547

2553/6881
FIGURE 2347

MPKVKRSRKAPPDGWELIEPTLDELQKMREAETEPHEGKRKVESLWPIFRIHHQKTRYIFDLFYKRKAISRXXX
XXXXXXXXXXXXKNLIAKWKQGYENLCCLRCIQTRDTNFGTNCICRVPKSKLEVGRIEEECTHCGCRGCSG

WO 2004/030615

PCT/US2003/028547

2554/6881
FIGURE 2348

GGCACGAGGGAGCCCAGAGCCGGTTCGGCGCGTCTGACTGCCAGAGTCCGCGGGCCGGGGCGCGGGAGGAGCCAAG
CCGCCATGGCCTACACAGCTTCCTGGTGGAGCCCATCAGCTGCCACGCCTGGAACAAGGACCGCACCCAGATTG
CCATCTGCCCCAACCAACCATGAGGTGCATATCTATGAAAAGAGCGGTGCCAAATGGACCAAGGTGCACGAGCTCA
AGGAGCACAAACGGGCAGGTGACAGGCATCGACTGGGCCCCCGAGAGTAACCGTATTGTGACCTGCGGCACAGACC
GCAACGCCTACGTGTGGACGCTGAAGGGCCGCACATGGAAGCCACGCTGGTCATCCTGCGGATCAACCGGGCTG
CCCCTGCGTGCCTGGGCCCCCAACGAGAACAAGTTTGCTGTGGGCAGCGGCTCTCGTGTGATCTCCATCTGTT
ATTTTCGAGCAGGAGAATGACTGGTGGGTTTGCAAGCACATCAAGAAGCCCATCCGCTCCACCGTCCTCAGCCTGG
ACTGGCACCCCAACAATGTGCTGCTGGCTGCCGGCTCCTGTGACTTCAAGTGTGCGATCTTTTCAGCCTACATCA
AGGAGGTGGAGGAACGGCCGGCACCCACCCCGTGGGGCTCCAAGATGCCCTTTGGGGAACCTGATGTTTGAATCCA
GCAGTAGCTGCGGCTGGGTACATGGCGTCTGTTTCTCAGCCAGCGGGAGCCGCGTGGCCTGGGTAAAGCCACGACA
GCACCGTCTGCCTGGCTGATGCCGACAAGAAGATGGCCGTGCGGACTCTGGCCTCTGAAACACTACCACTGCTGG
CGCTGACCTTCATCACAGACAACAGCCTGGTGGCAGCGGGCCACGACTGCTTCCCGGTGCTGTTACCTATGACG
CCGCCGCGGGGATGCTGAGCTTCGGCGGGCGGCTGGACGTTCTAAGCAGAGCTCGCAGCGTGGCTTGACGGCCC
GCGAGCGCTTCCAGAACCTGGACAAGAAGGCGAGCTCCGAGGGTGGCACGGCTGCGGGCGCGGGCCTAGACTCGC
TGACAAGAACAGCGTCAGCCAGATCTCGGTGCTCAGCGGCGGCAAGGCCAAGTGCTCGCAGTTCTGCACCACTG
GCATGGATGGCGGCATGAGTATCTGGGATGTGAAGAGCTTGGAGTCAGCCTTGAAGGACCTCAAGATCAAATTGAC
CTGTGAGGAATATGTTGCCTTCATCCTAACTGCTGGGGAAGCGGGGAGAGGGGTCAGGGAGGCTAATGGTTGCTT
TGCTGAATGTTTCTGGGGTACCAATACGAGTTCCCATAGGGGCTGCTCCCTCAAAAAGGGAGGGGACAGATGGGG
AGCTTTTCTTACCTATTCAAGGAATACGTGCCTTTTTCTTAAATGCTTTCAATTTATTGAAAAAAAAAAAAAAAAA
AAA

WO 2004/030615

PCT/US2003/028547

2555/6881
FIGURE 2349

MAYHSFLVEPI SCHAWNKDRTQIAICPNNHEVHIYEKSGAKWTKVHELKEHNGQVTGIDWAPESNRIVTCGTDRN
AYVWTLKGRTWKPTLVILRINRAARCVRWAPNENKFAVGSGSRVISICYFEQENDWWVCKHIKKPIRSTVLSLDW
HPNNVLLAAGSCDFKCRIFSAYIKEVEERPAPTPWGSKMPPFGEMLFESSSSCGWVHGVCFSASGSRVAWVSHDST
VCLADADKKMAVATLASETLPLLALTFTIDNSLVAAGHDCFPVLFTYDAAAGMLSFGGRLDVPKQSSQRGLTARE
RFQNLDDKKASSEGGTAAGAGLDSLHKNSVSQISVLSGGKAKCSQFCTTGMDGGMSIWDVKSLESALKDLKIK

WO 2004/030615

PCT/US2003/028547

2556/6881
FIGURE 2350

CAGCTTTCTCTCCTTTGAAAACACTAAGAATAATGTCACTGCATCAGTTTTTACTAGAGCCAATCACCTGTCATG
CCTGGAACAGGGATCGTACTCAGATTGCCCTCAGTCCCAATAATCACGAAGTGCACATCTATAAGAAGAACGGGA
GCCAGTGGGTGAAAGCTCATGAACTCAAGGAGCACAAACGGACACATCACAGGTATTGACTGGGCTCCCAAGAGCG
ACCGCATTGTCACTTGTGGGGCAGACCGCAATGCCTATGTCTGGAGTCAGAAAGATGGTGTTTGGAAAGCCAACCC
TGGTGATCCTGAGAATTAATCGCGCAGCTACTTTTTGTGAAGTGGTCCCCCTAGAGAACAAATTTGCTGTGGGAA
GTGGAGCACGACTCATTTCTGTTTGTTACTTTGAGTCTGAAAATGACTGGTGGGTGAGCAAGCACATTAAAAAGC
CGATTGCTCCACAGTCCTCAGCTTGGATTGGCATCCCAACAACGTTTTGCTGGCAGCAGGATCATGTGACTTCA
AATGCAGAGTGTCTTCTGCCTACATTAAAGAAGTGGATGAAAAGCCAGCCAGCACGCCCTGGGGCAGCAAGATGC
CTTTTGGGCAGCTGATGTGAGAGTTTGGTGGCAGTGGCACTGGTGGCTGGGTCCACGGGGTAAGCTTCTCTGCCA
GTGGGAGCCGCCTGGCCTGGGTCAGCCACGACAGCACCGTGTCTGTTGCTGATGCCTCAAAAAGTGTGCAGGTCT
CGACTCTGAAGACAGAGTTCCCTGCCGCTCCTAAGTGTGTCAATTTGTCTCAGAGAACAGCGTCGTGGCTGCTGGCC
ATGACTGCTGCCCAATGCTCTTTAACTACGATGACCGCGGCTGCCTGACCTTCGTCTCCAAGTTAGATATTCCAA
AACAGAGCATCCAACGCAACATGTCTGCCATGGAACGCTTCCGCAACATGGACAAGAGAGCCACAACCTGAGGACC
GCAACACGGCCTTGGAGACGCTGCACCAGAATAGCATCACTCAAGTCTCTATTTATGAGGTGGACAAGCAAGATT
GTCGCAAATTTGCACTACTGGCATCGATGGAGCCATGACAATTTGGGATTTCAAGACCCTCGAGTCTTCCATCC
AGGGCCTCCGGATAATGTGAAGCTGAGTG

PCT/US2003/028547

CTCCTCTGCTCCTCGAAGAAGGCCAGGGCGGGCGCTGCCGCAAGTTTGTGACATTTTCGCAGCGGAGACGCGCGCGG
GCATCTCGGGCCGACGGCTCGCGCGCGGCGGACCCCTCCAGAGCCCCCTAGTCGCGCCCCGGCCCCCTCCCGCTGC
CCGGAGTCCGGCGGCCACGAGGCCAGCCGCGTCTCCCGCGCTTGCTCGCCCGCGGCGCCGAGCCATGTCCCGG
GGGCCCCGAGGAGGTGAACCGGCTCACGGAGAGCACCTACCGGAATGTTATGGAACAGTTCAATCCTGGGCTGCGA
AATTTAATAAACCTGGGGAAAAATTATGAGAAAGCTGTAAACGCTATGATCCTGGCAGGAAAAGCCTACTACGAT
GGAGTGGCCAAGATCGGTGAGATTGCCACTGGGTCCCCCGTGTCAACTGAACTGGGACATGTCTCATAGAGATT
TCAAGTACCCACAAGAACTCAACGAGAGTCTTGATGAAAATTTAAAAAATTCACAAAAGAGATTATCCATGAG
CTGGAGAAGAAGATAGAACTTGACGTGAAATATATGAACGCAACTCTAAAAAGATAACCAAACAGAACACAAGAAT
AAATTAGAGTCTTTGGAGAAATCCCAAGCTGAGTTGAAGAAGATCAGAAGGAAAAGCCAAAGGAAGCCGAAACGCA
CTCAAATATGAACACAAAGAAATTGAGTATGTGGAGACCGTTACTTCTCGTCAGAGTGAAATCCAGAAATTCATT
GCAGATGGTTGCAAAGAGGCTCTGCTTGAAGAGAAGAGGCGCTTCTGCTTTTCTGGTTGATAAGCACTGTGGCTTT
GCAAACCACATACATTATTATCACTTACAGTCTGCAGAACTACTGAATTCCAAGCTGCCTCGGTGGCAGGAGACC
TGTGTTGATGCCATCAAAGTGCCAGAGAAAATCATGAATATGATCGAAGAAATAAAGACCCAGCCTCTACCCCC
GTGCTGGAACCTCCTCAGGCTTACCCATGATCGAGAGAAGCAATGTGGTTAGGAAAGATTACGACACCCCTTTCT
AAATGCTCACCAAAGATGCCCCCGCTCCTTCAGGCAGAGCATATACCAGTCCCTTGATCGATATGTTTAATAAC
CCAGCCACGGCTGCCCCGAATTCACAAAGGGTAATAATTCAACAGGTACTTCCGAAGATCCCAGTTTACAGCGA
TCAGTTTCGGTTGCAACGGGACTGAACATGATGAAGAAGCAGAAAGTGAAGACCATCTTCCCGCACACTGCGGGC
TCCAACAAGACCTTACTCAGCTTTGCACAGGGAGATGTCATCACGCTGCTCATCCCCGAGGAGAAGGATGGCTGG
CTCTATGGAGAACACGACGTGTCCAAGGCGAGGGGTTGGTTCCCGTCTGTCGTACACGAAGTTGCTGGAAGAAAAT
GAGACAGAAGCAGTGACCGTGCCACGCCAAGCCCCACACCAGTGAGAAGCATCAGCACCGTGAACCTTGCTGAG
AATAGCAGTGTGTTCATCCCCCACC CGACTACTTGGAATGCTTGTCATGGGGGCAGCTGCCGACAGGAGAGCA
GATTCGGCCAGGACGACATCCACCTTTAAGGCCCCAGCGTCCAAGCCCCGAGACCGCGGCTCCTAACGATGCCAAC
GGGACTGCAAAGCCGCTTTTCTCAGCGGAGAAAACCCCTTTGCCACTGTGAACTCCGCCCCGACTGTGACGAAT
GATCGCTCGGCACCCATCATTGATGAGAGGACAGCCAAGGACTCTCCCGGGCCTCTCCGGTTCTCCCTTGCGGA
ATGATGGGCGCATCCTGTCTGCCACGTGCTGACGGTCGGGAAGCTTCAGTGGAGAGGCCTAACTCTAATGTCGCC
TGCTTAAGCAAATCATGCTTCTCTGTTTACGTAAGTTGGGTTGACAAGTTTCTGCCTTTAAGATAAATGAGTAAT
AGTCTAATGACCAGCTCAGCCATTTAAATATTTTCTTCCATTCTGTTCAAGAAACAGTAAACTTGGTTTCAAT
CTTTACTGTATTTTTTAAATGAATTTTTTCTTAAATAACAGCCAGAATAAGGGATAGTCTATGCTTTCAGGACTG
GCTTTCTGCACCTGATATGAATGAGACCAGTTTTATTTTATAAAGCATGTGCTCTTAATAGCATTATGTCTAAAG
AAGATATCACGTAAGTTTGCATCTTAGCATGCAAATCATAATTTTAAGCAATATAAATTATGAAAATACTATATA
AATGTAATTTAACTTAAATGTTTAAGTGTAGAGCTTCCAGAGATGGAGAAACCCCAACCTCCCTCCAACCAG
CCAGAGCTGTAGAGTGCTAAGACGCTTTGCCTGCCCTTATCACAGCCACACGTAGCACTCGACGAAATCTCCTCC
GAGAGCTCCTTTTCTTGGTAGTTAGGAGTCGCCAACGGATTGCTGCACACGGGCCATCCAGGACACAGGCTGG
GCGTGGGAGTCACGGCTCCTTGTTCTCACTCAGCTAGTTGGCCAAAGCTGCATCCATTACCAGTACACTCAA
CTGCTCGGGGTCTGGTTTCTCCGTGTTTGAATCAGGTACAGACTCTCAAAGGATACGTTGTAAGACAGGATGAC
CTCTGGTGCTGGAGAAGGGCGGGTTTTTTCAGCCTAGCAGCCATGATGCCCTCGGAACCTGGCCCTATGGTATGG
ATGTGAGGACTACGCACTGGCTGCCCTGAGCCGGGGCTGGAATCATCTTTGGCTGCCAAGGATCTGGACCTAT
TTTGGAGTGGAGAGTCATGTTTAAATTTCCAGCCCGGGCCAGGTACGGGAATCCAGCATTTTGTGAGGCCGAG
GCAGGGGGATCACCTGAGGTGAGGAGTCTCTACTAAAAATACAAAAATTAGACAGGTGTGGTGGTGGGCGCCACT
CAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGAGGTTGCAGTGAGCCAGATCATGCTGCTGCACCT
CCAGCCCGGCCGCTCACCGTGTGTGTTGCTGGGTGCTGGGGCTGTGACTTATCCCCCTCTCCTTTAGCCTTGCCAT
AAGTGTAGTATCCTATGAGGCTGAGATTGGGAAAGGTTACATGCAGGTAAGCCAGTGAGCGTGGCCGATGCTTCA
GGCTCCTTCCAGCCAGGTCCAGCAGTGTTACCATCTGCTTCTCCTGGGAGGACAAACAGGCACCCCCACCATGA
AGGGGCTGCAGGCACCATGAACTATGTTAACAACCCCAAGTCTGTACTACAGAAAGGGCTGCAGCCACATGAGAAT
TCAGTCCACACAAGCCCCATGGCCGTGTTCCCCACTTCAGCCACAGGGCTCAGGGAGCCCCATCTGGCGCTAAGG
GGAAC TGCTGGGGTGTGGGTGACACCTGGCCTTTGGCGTTCTGCCTTGGGGAGGTTTCTGGTTTTGTTACGGGGT
GGAAGAATAGGACCTGGGGGTCTCGGATGCAACCTGCAGACCCCGTGGCTCACCCAACCCCAAGTTCTGCCTCCC
AGACCAGAACGGGCATGGCCTGGTCTTTGGCACCGAGGTGCCTGCTCTGTAAATATCAAGGGATTACAACCTTAA

WO 2004/030615

PCT/US2003/028547

2558/6881
FIGURE 2351B

TAATAAAGCAGAACTTG

WO 2004/030615

PCT/US2003/028547

2559/6881
FIGURE 2352

GGCGGTTGGCAAGAACAAGCGCCTTACGAAAGGCGGCCAAAAGGGAGCCAAGAAGAAAGTGGTTGATCCATTTTC
TAAGAAAGATTGGTATGATGTGAAAGCACCTGCTATGTTCAGTATAAGAAATATTGGAAAGACGCTCGTCACCAG
GACCCAAGGAACCAAAATTGCATCTGATGGTCTCAAGGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTTCAGAA
TGATGAAGTTGCATTTAGAAAATTCAGGCTGATTACTCTTCGTCTGTTCTGTGTTGGTTTTACTAAAAACGCAA
CAATCAGATACGGAAGACCTCTTATGCTCAGCACCAACAGGTCCGCCAAATCCGGAAGAAGATGATCGAAATCAT
GACCCGAGAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAATAAATTGATTCCAGACAGCATTTGGAAGACAT
AGAAAAGGCTTGCCAGTCTATTTATCCTCTCCATGATGTCTTCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAA
GTTTGAATTGGGAAAGCTCATGGAGCTTCATGGTGAAGGCAGTAGTTCTGGAAAAGCCACTGGGGACGAGACAGG
TGCTAAAGTTGAACGAGCTGATGGATATGAACCACCAGTCCAAGAATCTGTTTAAAGTTCAGACTTCAAATAGTG
GCAATAAAGAGTGCTATTTGTGAAAAAAAAAACAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2560/6881
FIGURE 2353A

CGCAGTGCTGCTGGGGCATTGCCTGTGACAACCAGGTCTACGTGTATGTGTGTGCCAGCGATGTCCCCATCCGCC
GCCGAGAGGAGGCCTATGAGAATCAGCGCTGGAATCCCATGGGCGGCTTCTGTGAGAAGCTCCTGCTGAGTGACC
GCTGGGGGTGGAGTGACGTGAGTGGGCTCCAGCACCGGCCGCTGGACAGGGTGGCACTGCCCTCGCCGCACTGGG
AGTGGGAGTCTGACTGGTACGTGGATGAGAATTTTGGAGGTGAACCCACTGAGAAAGGGGGTGGACGTACGCCA
TCGACTTTCCCGCCACCTACACGAAAGACAAGAAGTGAATTCTTGTGTGCGGCGCCGGAAGTGATCCGGTACA
GGAGATACAAGTCCCGGGACATCTGGGCAAGATCCCCTCGAAGGATGACCCCAAGGAGCTGCCCGACCCCTTCA
ACGACCTCTCTGTAGGGGGCTGGGAGATCACGGAGGAGCCTGTGGGCGCGCTGTCACTGTGGGCTGTGTCTCTGC
AGGGCAAGGTGTGGTACAGAGAGGACGTACGCCACTCCAACCCCGAAGGGTCCTCTGGTCCCTGCTGGACACCC
CCGGGGAGGTGGTTTCAATCAGCTGTGGGCCCCACGACCTCCTGTGGGCCACACTCTGGGAGGGACAGGCCCTGG
TCCGGGAAGGAATCAACAGGAGCAATCCCAAAGGAAGTTCTGGTCCATCGTGGAGCCTCCTGGATCTGAAAACG
GGGTCAATGCACATCTCGGTGGGAGTCAGCGTGGTCTGGGCTGTACCAAGGACTGGAAGGTGTGGTTCCGAAGAG
GCGTCAACTCTCACAATCCCTGCGGCACCAAGTTGGATTGAGATGGTTGGTGAGATGACGATGGTGAACGTGGGAA
TGAACGACCAGGTGTGGGGCATTGGCTGTGAGGACCGAGCCGTGTACTTCCGGCAGGGTGTACCCCCAGCGAGC
TCAGTGGGAAGACCTGGAAAGCCATCATCGCGGCCCGAGAGTGTGACCGGTACACTCTGGCAGCTCGTCTAGTC
TCTTCAGTGCCGGCTGCTTCTTCGGTGATGAGGTGAGGGGTAGTGGCGAGTCTGCCCCAGCGACACCGATGCCCT
CCTCGGAAGTCGAGAGACCAGGGCCTGGCCAGATTCTCCCTGCAGAACCTCTAGACGATTCCAAGAATGCCACAG
GGAATCAGCCTCAGGCCTGGGGGCTGGCAGGACCGCAGAAGATAACCGTGGAAGATGCCTGCCAGCCGAGGGCA
GCAGGGAGGCCAGACCCAACACGCACCCCGGGCCCGGGCCCCACCCCGGCCGAGCTGCCCTGGACCAATATTGACC
TCAAGGAGGCCAAGAAAGTGCCCGAGCCACTCGGCCGCTGGCTTCCCGAGACCACAGCCCTCTCCTCTCTGGGGC
TCCTCCCACTGGGCTTGGAGGAGCCGTATGGGGTGGATGACCACCCGCTGTGGGGCTGGGTGTGGGAGGCGGCT
GCGTGGTGGAGGCATGTGCCATGCCCAGATGGTTCACTGTCCAGGCGGGCCTGTCTCTCGGTACACATGCTGT
CCCTGTCCATCACGCCGGCCAGACCGCTGCCTGGAGGAAGCAGATCTTCCAGCAGCTCACGGAAGGACCAAGC
GGGAGCTGGAGAACTTACAGACTACGAGCAGGCCGTGGAGCAGTCGGTGTGGGTGAAGACCGGGGCGCTGCAGT
GGTGGTGCAGCTGGAAGCCCCACAAGTGGGTGGACGTGCGCTTGGCCCTGGAGCAGTTACGGGGCACGACGGCG
TCCGGGACAGCATCCTCTTCACTACTATGTGGTCCACGAGGAGAAGAAGTACATCCACATATTCTGAATGAGG
TGGTGGCGCTGGTCCAGTGCTGAACGAGACCAAGCAGTCCCTTGGCCCTGTACACCCCTGAGCGGACACGGCAGA
GGTGGCCGCTGCGTCTGGCTGCTGCCACCGAGGACATGAATGACTGGCTCGCCCTGCTCAGCCTGTCTTGCT
GCGAGAGCCGGAAGGTGCAGGGCCGCCCCGCGAGGCCATCTGGTCCATCACCTGCAAGGGGGACATCTTCG
TGAGCGAGCCCAGCCAGACCTGGAGGCCACGAGCACCCCTGCCCCTGCGACCAGATGTTTTGGCGGCAGATGG
GAGGCCACCTGCGGATGGTGGAGGCCAACAGCCGGGGCGTGGTGTGGGGCATCGGCTATGACCACAGGCCTGGG
TATACACAGGCGGCTATGGAGCGGCTGCTTCCAAGGCCTGGCCAGCAGCACCAGTAACATCTACACGCAGTCAG
ACGTGAAGTGTGTTACATCTATGAGAACCAGCGCTGGAACCCCGTCACAGGCTACACCAGCAGGGGTCTGCCCA
CGGACCGGTACATGTGGAGCGATGCCTCGGGGCTGCAGGAGTGCACGAAGGCTGGCACGAAGCCCCCGTCCCTGC
AGTGGGCCTGGGTTTCCGACTGGTTCTGTGGATTTCAGCGTTCCGGGGGGCACGGACCAGGAGGGGTGGCAGTATG
CCAGCGACTTCCCTGCCCTACATACCATGGGTCCAAAACGATGAAGGATTTTGTGAGGAGGAGGTGCTGGGCCAGAA
AATGCAAGCTGGTGACCAGTGGGCCCTGGCTGGAGGTGCCCCCATCGCCCTCAGGGACGTGTCCATCATCCCGG
AGAGCCCGGTGCCGAGGGGAGTGGGCACAGCATCGCCCTCTGGGCGCTCAGCGACAAGGGGGATGTGCTGTGCC
GCCTGGGCGTGTTCGAGGCTCAACCCCTGCGGGCTCCTCCTGGCTGCACGTTGGCACCGACAGCCCTTCGCCTCCA
TCTCCATCGGGGCTGTACCAGGTGTGGGCGTGGCAAGGGACGGCTCCGCTTCTACCGGGGATCCGTGTACC
CCTCGCAGCCAGCCGGTGAATGCTGGTACCACATCCCGTCCCCACCGAGACAGAGGCTGAAGCAGGTGTCCGCGG
GGCAGACGTCCGGTGTATGCCCTGGATGAGAATGGAAACCTGTGGTATCGCCAAGGGATCACGCCAGCTACCCGC
AGGGCTCCAGCTGGGAGCACGTGTCCAACAACGTGTGCCGAGTGTCCGTGGGGCCCTGGACCAGGTCTGGGTGA
TCGCCAACAAAGTGACGGGCAGCCACAGCCTGAGCCGGGGGACAGTGTGTATCGCACCGGCGTGCAGCCTCACG
AGCCCAAGGGCCACGGCTGGGACTACGGCATCGGGGGAGGCTGGGACCATATCTCTGTCCGGGCCAATGCCACCA
GGGCCCCCGGAGCTCGTCCCAGGAGCAGGAGCCGAGTGCCCCACAGAGGCCCATGGCCCCGTCTGCTGCTGAG
GCCCCCCCACACCTACATGCAGGGACGGTGGCCAGTTTGGGGGATCAAGGCTGAGCATTCTTGTGCTGGAGT
GTGCACCGTGGGAGCAATGTGGCCAGGTGGACTCAGGAGGGAACCTGGCCCCAAGGCTGCGGCCACTTCAGAGG
CACTGGCTGAGACGGCCCTGAAATGTGAAGCTCCGCGGACACTCCACACGTGTCCCGTCTGCGAGGAGTCCCG

WO 2004/030615

PCT/US2003/028547

2561/6881
FIGURE 2353B

GGGTGTGGGGCATGGGGTGGGGCTGCACCTCCCAGAGGCCCTCCCACCCTTCCCTTCCCCTCTCCCTTCTGCCT
TTCCAGGACTAGAACCGGGAACCTGGAGCCCTCCGGGAACGCCGGCCCTGGGGCAGCAGAGCCAGGATGGAGCCC
TCCTGAGCTGGCATCTCAGACAGCACCCGGGCCCCGCCACCCCTCACCAAGAGAGATGGCCATGGGGCTCAGGGCC
TCTTTACCATGTGCAGTGACCATTCTCAGAGCAGGACTTGCAAAGAGGCTTTAATTTCAAAGTGAAGGAAGGA
GGCCAGGCGCCGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGGGCAGATCACCTAGGTCAAGA
GTTTCAAACCAGACGGGCCAACATGGTGAAACCCCATCTCTGCTAAAAATACAAAAAAAAAAAAATTAGCTGGGC
ATGGTGGTGGGTGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGTTTGAACCCGGGAGGCGGAG
GCTGCAGTGAGCCGAGATCATGCCACTGCACTCCAGCCTGGGCGACAGAGACTCCATCTC

WO 2004/030615

PCT/US2003/028547

2562/6881
FIGURE 2354

MGWGCTSQRLPPFPSPPLPSAFPGLPGTWSPPGTPALGQQSQDGALLSWHLRQHPGPPPLTKRDGHGAQGLFTM
CSDHFSEQDLQRGFNFKSEGRRPGAVAHACNPSTLGG

WO 2004/030615

PCT/US2003/028547

2563/6881
FIGURE 2355

AAACTTCCCGCACGCGTTACAGGAGCCAGGTCGGTATAAGCGCCAGCGGCCTCGCCGCCCCGTCAAGCTGTCCACA
TCCCTGGCCTCAGCCCGCCACATCACCCCTGACCTGCTTACGCCCAGATTTTCTTCAATCACATCTGAATAAATCA
CTTGAAGAAAGCTTATAGCTTCATTGCACCATGTGTGGCATTGTTGGCGCTGTTTGGCAGTGATGATTGCCTTTCT
GTTCAAGTGTCTGAGTGCTATGAAGATTGCACACAGAGGTCCAGATGCATTCCGTTTTGAGAAATGTCATGGATAC
ACCAACTGCTGCTTTGGATTTACCGGTTGGCGGTAGTTGACCCGCTGTTTGGAAATGCAGCCAATTTCGAGTGAAG
AAATATCCGTATTTGTGGCTCTGTTACAATGGTGAAATCTACAACCATAAGAAGATGCAACAGCATTTTGAATTT
GAATACCAGACCAAAGTGGATGGTGAGATAATCCTTCATCTTTATGACAAAGGAGGAATTGAGCAAACAATTTGT
ATGTTGGATGGTGTGTTTGCATTTGTTTTACTGGATACTGCCAATAAGAAAGTGTTCCCTGGGTAGAGATACATAT
GGAGTCAGACCTTTGTTTAAAGCAATGACAGAAGATGGATTTTTGGCTGTATGTTTCAAGCTAAAGTCTTGTT
ACATTGAAGCACTCCGCGACTCCCTTTTTAAAGTGGAGCCTTTTCTTCCCTGGACACTATGAAGTTTTGGATTTA
AAGCCAAATGGCAAAGTTGCATCCGTGGAAATGGTTAAATATCATCACTGTCGGGATGAACCCCTGCACGCCCTC
TATGACAATGTGGAGAACTCTTTCCAGGTTTTGAGATAGAACTGTGAAGAACAACCTCAGGATCCTTTTTAAT
AATGCTGTAAAGAAACGTTTGATGACAGACAGAAGGATTGGCTGCCTTTTATCAGGGGGCTTGGACTCCAGCTTG
GTTGCTGCCACTCTGTTGAAGCAGCTGAAAGAAGCCCAAGTACAGTATCCTCTCCAGACATTGCAATTGGCATG
GAAGACAGCCCCGATTTACTGGCTGCTAGAAAGGTGGCAGATCATATTGGAAGTGAACATTATGAAGTCCTTTTT
AACTCTGAGGAAGGCATTACGGCTCTGGATGAAGTCATATTTTCTTGGAACTTATGACATTACAACAGTTCGT
GCTTCAGTAGGTATGTATTTAATTTCCAAGTATATTGGAAGAACACAGATAGCGTGGTGATCTTCTCTGGAGAA
GGATCAGATGAACCTACGCAGGGTTACATATATTTTACAAGGCTCCTTCTCCTGAAAAAGCCGAGGAGGAGAGT
GAGAGGCTTCTGAGGGAACTCTATTTGTTTGATGTTCTCCGCGCAGATCGAACTACTGCTGCCCATGGTCTTGAA
CTGAGAGTCCCATTCTAGATCATCGATTTTCTTCTTACTTGTCTCTGCCACCAGAAATGAGAATTCCAAAG
AATGGGATAGAAAAACATCTCCTGAGAGAGACGTTTGAGGATTCCAATCTGATACCCAAAGAGATTCTCTGGCGA
CCAAAAGAACCTTCAGTGATGGAATAACTTCAGTTAAGAATTCCTGGTTTAAGATTTTACAGGAATACGTTGAA
CATCAGGTTGATGATGCAATGATGGCAAATGCAGCCCAGAAATTTCCCTTCAATACTCCTAAAACCAAAGAAGGA
TATTACTACCGTCAAGTCTTTGAACGCCATTACCCAGGCCGGGCTGACTGGCTGAGCCATTACTGGATGCCCAAG
TGGATCAATGCCACTGACCCTTCTGCCCCGACGCTGACCCACTACAAGTCAGCTGTCAAAGCTTAGGTGGTCTTT
ATGCTGTAATGTGAAAGCAAATATTTCTTCGTGTTGGATGGGGACTGTGGGTAGATAGGGGAACAATGAGAGTCA
ACTCAGGCTAACTTGGGTGTGAAAAAATAAAAGTCCTAAATCT

WO 2004/030615

PCT/US2003/028547

2564/6881
FIGURE 2356

MCGIWALFGSDDCLSVQCLSAMKIAHRGPDAFRFENVNGYTNC CFGHRLAVVDPLFGMQPIRVKKYPYLWLCYN
GEIYNHKKMQQHFEFEYQTKVDGEIILHLYDKGGIEQTICMLDGVFAFVLDDTANKKVFLGRDTYGVRLFKAMT
EDGFLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVLDLKPNGKVASVEMVKYHHC RDEPLHALYDNVEKLFPG
FEIETVKNNLRILFNNAVKKRLMTDRRIGCLLSGGLDSSLVAATLLKQLKEAQVQYPLQTFAIGMEDSPDLLAAR
KVADHIGSEHYEVLFNSEEGIQALDEVIFSLETYDITTVRASVGMYLISKYIRKNTDSVVIFS GEGSDELTQGYI
YFHKAPSPEKAEESERLLRELYLFDVLRADRTTAAHGLELRVPFLDHRFSSYYLSLPPEMRIPKNGIEKHLRE
TFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVEHQVDDAMMANAAQKFPFNTPKTKEGYYYRQVFERH
YPGRADWLSHYWMPKWINATDPSARTLT HYKSAVKA

PCT/US2003/028547

CCTTTCTGTCCTGGTTCCCTGAAGCATCGAGAGGAAACCGCGCGCGGACGGCCGAGCCGCTCCGGAGAGGAGGAGCA
GCGGCAGTTTTGAGCCCTGTAAATGTTATATGTGTACTTTTTTTTACTATGTGGCGTCTGAAGCCTGTGGACATTT
TCGCGGTCCGGGTCCCTGCGGCGGACGGGTTCGATCGTGTCTGTGGCCAGGGCGCAGTCAGGTGTGCGTGGTCC
TGATCTAGGAAGAGACTGCGGCCTTATCACCGTCTCGGTGTCTGCTTTACCTTCAACTGCCCCCTCCTCACCT
GGACCGCTCACCTCCTCCTCCCCTCTCACCCCGCCATCCCCACCAGTCCCCACCTGTCTCTGTAGACTGCAAGA
CTCATCAAGTGACTTGCTGAGCAAACCTGCCGAGAAGAGATTTTCTTCAATCACATCTGAATAAATCACTTGAA
GAAAGCTTATAGCTTCATTGCACCATGTTGTGGCATTGTGGCGCTGTTTGGCAGTGATGATTGCCTTTCTGTTTCA
GTCTTGAGTGTCTATGAAGATTGCACACAGAGGTCCAGATGCATTCCGTTTTGAGAATGTCAATGGATACACCAAC
TGCTGCTTTGGATTTTACC GGTTGGCGGTAGTTGACCCGCTGTTTGGAAATGCAGCCAATTCGAGTGAAGAAATAT
CCGTATTTGTGGCTCTGTTACAATGGTGAAATCTACAACCATAAGAAGATGCAACAGCATTTTGAATTTGAATAC
CAGACCAAAGTGGATGGTGAGATAATCCTTCATCTTTATGACAAAGGAGGAATTGAGCAAACAATTTGTATGTTG
GATGGTGTGTTTGCATTTGTTTTACTGGATACTGCCAATAAGAAAGTGTTTCTGGGTAGAGATACATATGGAGTC
AGACCTTTGTTTTAAAGCAATGACAGAAGATGGATTTTTGGCTGTATGTTTCAAGCTAAAGGTCTTGTACATTG
AAGCACTCCGCGACTCCCTTTTTTAAAGTGGAGCCTTTTCTTCCGACACTATGAAGTTTTGGATTTAAAGCCA
AATGGCAAAGTTGCATCCGTGGAAATGGTTAAATATCATCACGTGTCGGGATGAACCCCTGCACGCCCTCTATGAC
AATGTGGAGAAACTCTTTCCAGGTTTTGAGATAGAAACTGTGAAGAACAACCTCAGGATCCTTTTTAATAATGCT
GTAAAGAAACGTTTGATGACAGACAGAAGGATTGGCTGCCTTTTATCAGGGGGCTTGGACTCCAGCTTGGTTGCT
GCCACTCTGTTGAAGCAGCTGAAAGAAGCCCAAGTACAGTATCCTCTCCAGACATTTGCAATTGGCATGGAAGAC
AGCCCCGATTTACTGGCTGCTAGAAAGGTGGCAGATCATATTGGAAGTGAACATTATGAAGTCCTTTTTAACTCT
GAGGAAGGCATTACAGGCTCTGGATGAAGTCATATTTTCCCTTGGAAACTTATGACATTACAACAGTTCGTGCTTCA
GTAGGTATGTATTTAATTTCCAAGTATATTCCGAAGAACACAGATAGCGTGGTGATCTTCTCTGGAGAAGGATCA
GATGAACTTACGCAGGGTTACATATATTTTACAAGGCTCCTTCTCCTGAAAAAGCCGAGGAGGAGAGTGAGAGG
CTTCTGAGGGAACTCTATTTGTTTGATGTTCTCCGCGCAGATCGAACTACTGCTGCCCATGGTCTTGAAC TGAG
GTCCCATTTCTAGATCATCGATTTTCTTCCATTACTTGTCTCTGCCACCAGAAATGAGAATTCCAAAGAATGGG
ATAGAAAAACATCTCCTGAGAGAGACGTTTGAGGATTCCAATCTGATACCCAAAGAGATTCTCTGGCGACCAAAA
GAAGCCTTCAGTGATGGAATAACTTCAGTTAAGAATTCCTGGTTTAAAGATTTTACAGGAATACGTTGAACATCAG
GTTGATGATGCAATGATGGCAAATGCAGCCCAGAAATTTCCCTTCAATACCTCTAAAACCAAAGAAGGATATTAC
TACCGTCAAGTCTTTGAACGCCATTACCCAGGCCGGGCTGACTGGCTGAGCCATTACTGGATGCCCAAGTGGATC
AATGCCACTGACCTTCTGCCCGCACGCTGACCCACTACAAGTCAGCTGTCAAAGCTTAGGTGGTCTTTATGCTG
TAATGTGAAAGCAAATATTTCTTCGTGTTGGATGGGGACTGTGGGTAGATAGGGGAACAATGAGAGTCAACTCAG
GCTAACTTGGGTGTGAAAAAATAAAAGTCCATAAATCTAAAAA

WO 2004/030615

PCT/US2003/028547

2566/6881
FIGURE 2358

MCGIWALFGSDDCLSVQCLSAMKIAHRGPDAFRFENVNGYTNC CFGHRLAVVDPLFGMQPIRVKKYPYLWLCYN
GEIYNHKKMQQHFEFEYQTKVDGEIILHLYDKGGIEQTICMLDGVFAFVLLDTANKKVFLGRD TYGVRPLFKAMT
EDGFLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVL DLKPNGKVASVEMVKYHHRDEPLHALYDNVEKLFPG
FEIETVKNNLRILFNNAVKKRLMTDRRIGCLLSGGLDSSLVAATLLKQLKEAQVQYPLQTFAIGMEDSPDLLAAR
KVADHIGSEHYEVL FNSEEGIQALDEVIFSLETYDITTVRASVGMYLISKYIRKNTDSVVIFSGEGSDELTQGYI
YFHKAPSPEKAE EESERLLRELYLFDVLRADRTTAHGLELRVPFLDHRFSSYYLSLPPEMRIPKNGIEKHLRE
TFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVEHQVDDAMMANAAQKFPFNTPKTKEGYYYRQVFERH
YPGRADWLSHYWMPKWINATDPSARTLTHYKSAVKA

WO 2004/030615

PCT/US2003/028547

2567/6881
FIGURE 2359

CCTGGCTGGGACGGAAGTTGCACCACAAGTACAATTAGTTTCAGTTTTGTTTCTTTTCCAGGCACCCAGCAACGG
CGGCCTCCAGGCCTCAGGCCCCCTCACCATCCTAGAGGTCAAGATCAGCTCTGGCTAGTTCTCACAGGTCTGACC
CAACAAGTAGCACTGACATTTTTACGTTTGCTGGATGTACACACGGAAGTGGAGGAGGAGGAGGAGAAGGAGGAG
GGCAGCTCCTTAGCTCAAGAGCAAGTGGCCCCAAGGCCTCAGAAGACTAGAAGGAAGTTCCTGGCCATTGAGCATG

GTTTCCCACGGGTCTCTGCCCTCCCTCCTGGAGGCCCTGAGCAGCGACTTCCTGGCCTGTAAAATCTGCCTGGAG
CAGCTGCGGGACCCCAAGACACTGCCCTGCCTGCATACCTACTGCCAAGACTGCCTGGCACAGCTGGCGGATGGC
GGCCGCGTCCGCTGCCCCGAGTGCCGCGAGACAGTGCTGTGCCGCCGAGGGTGTGGCCTCCTTCAAGACCAAC
TTCTTCGTCAATGGGCTGCTGGACCTGGTGAAGGCCCGGGCCTGTGGAGACCTGCGTGCCGGGAAGCCAGCCTGT
GCCCTGTGTCCCTGGTGGGTGGCACCAGCACCGGGGGGGCGGCCACGGCCCGGTGCCTGGACTGTGCCGATGAC
TTGTGCCAGGCCTGTGCCGACGGGCACCGCTGCACCCGCCAGACCCACACCCACCGCGTGGTGGACCTGGTGGGC
TACAGGGCCGGGTGGTATGATGAGGAGGCCCGGGAGCGCCAAGCGGCCAGTGTCCCCAGCACCCCGGGGAGGCA
CTGCGCTTCTGTGCCAGCCCTGCTCAGATTGCTGTGCAGAGAGTGCCGCTAGACCCCACTGGACCACCCC
TGCTTGCTCTGGCTGAAGCTGTGCGTGCCCGGAGGCCGGGCCTGGAGGGACTGCTGGCCGGTGTGGACAATAAC
CTGGTGGAGCTGGAGGCAGCGCGGAGGGTGGAGAAGGAGGCGCTAGCCCGGCTGCGGGAGCAGGCGGCCCGGGT
GGGACTCAGGTGGAGGAGGCGGCTGAGGGCGTCTCCGGGCCCTGCTGGCCAGAAGCAGGAGGTGCTGGGGCAG
CTACGAGCCACGTGGAGGCTGCCGAAGAAGCTGCTCGGAGAGGCTGGCGGAGCTTGAGGGCCGGGAGCAGGTG
GCCAGGGCCGCGAGCCGCTTCGCCCCCGGGTACTCAGCCTGGGGCGAGAGGCCGAGATCCTCTCCCTGGAAGGG
GCGATCGCACAGCGGCTCAGGCAGCTGCAGGGCTGCCCCTGGGCACCAGGCCCGGGCCCCCTGCCTGCTCCACAG
CTGGAGCTCCATCCTGGGCTCCTGGACAAGAACTGCCACCTTCTTCGGCTGTCTTTGAGGAGCAGCAGCCCCAG
AAGGATGGTGGGAAAGACGGAGCTGGTACCCAGGGAGGTGAGGAGAGCCAGAGCCGGAGGGAGGATGAGCCGAAG
ACTGAGAGACAGGGTGGAGTCCAGCCCCAGGCTGGAGATGGAGCCAGACCCCAAAAGAGGAAAAAGCCAGACA
ACCCGAGAAGAGGGAGCCAGACCTTGAGGAGGACAGGGGCCAGACACCCACGAGGATGGAGGACCCAGCCCC
CACAGGGGTGGCAGACCCAACAAGAAGAAAAAGTTCAAAGGCAGGCTCAAGTCAATTTCCCGGGAGCCAGCCCA
GCCCTGGGGCCGAATCTGGACGGCTCTGGCCTCCTCCCCAGACCATCTTTTACTGCAGTTTCCCCACGCGGATG
CCTGGAGACAAGCGGTCCCCCGGATCACCGGCTCTGTCCCTTCGGTCCCCGGGAGATCCTGGTGGCGGATGAG
CAGAACCGGGCACTGAAACGCTTCTCCCTCAACGGCGACTACAATATGGAAGGCAGCCTGGCCACCCGGTTTATTCT
CCTTGACGCTGGCCGCCCTGCAGAGCGCGGTGGCCTTCTCCGCTAGCGCACGGCTCTATCTCATCAACCCCAAC
GGCGAAGTGAGTGGCGCAGGGCCCTGAGCCTCTCCAGGCCAGCCACGCGGTGGCGCACTGCCTAGCGGGGAC
CGCGTGGCTGTACGCTGGCGGGCCACGTGGAGGTGTACAATATGGAAGGCAGCCTGGCCACCCGGTTTATTCT
GGAGGCAAGGCCAGCCGGGGCTGCGGGCGCTGGTGTCTTGACCACAGCCCCAGGGGCATTTCTGGGGTCTG
GACTGGCAGCAGAAATAGTGTGTAATCTGTGATGGCTGGGCCAGGTGGTTGGGGAGTACAAGGGGCCAGGCCTG
CATGGCTGCCAGCCGGGCTCCGTGTCTGTGATAAGAAGGGCTACATCTTTCTGACCCTTCGAGAAGTCAACAAG
GTGGTGATCCTGGACCCGAAGGGGTCCCTCCTTGGAGACTTCTTGACAGCCTACCACGGCCTGGAAAAGCCCCGG
GTTACCACCATGGTGGATGGCAGGTACCTGGTCTGTCCCTCAGTAACGGGACCATCCACATCTTTCGGGTCCGT
TCTCCGGACAGTTAAAGGGGCTAGGACTAGGGTGGAGGGAGTGGGGAGGGAGAGGGCAGGAAGGAGGCAGAGCT
GTCCGTGGGAGGTGGAGGCCGAGGACATTTTCTGAAGGGCAGGGGTGGCAACTTTTCAACATGGAGTGCCAAA
CTGCTAACCCGCTCTTCTAGTGTGTGAGAATAGGGACCAAGGTGGTGGCGTGACCTTAACCTCTCAGAAGCAGAGGA
GGCAGGTGGGTGGAGGGGGATGCTGGGAGTTACCTGCCTCTTGCTTTTGTGGGTGGCTGCTGCCACCACCGCC
GCTGCTATATAGTTTAGGTTTCTGAGGTTTGTGAGCCTGTCTGCTTTTGCACTTCTTCAAACCATTCCTGATAGA
GTAGCCGAGGGAGAGTCTTGGGGCCAAGAAGGGCCAGGGTGGGTGAGCGTGTGCACTGTGGAACAGAGCTGAG
ACCCCGGGCCCCCTTGGACTGGCACAGGGTCTACAGAGTCAGAGGAGGCCTGAGATTTGGAATGGGCAGTGAAT
GGCCTCTTCTGCCAGCCACAGGCAGGATGCTCCTTGATCACGGCATCCCCCGGCGGTAGTACAGGGTGAGCTTGC
AGGAGGGTCTGCAAGTGCAGACAGCAGCTGGGGCCAAAGAGGTGTTAGGTTCAAAGGCTGCGAAGAGAATAGGCT
ACTGGA AAAACCAAACCAACAGAATTCACGTCCAAAATCCACATTCTCCATCGCTTCTCAGCCTTTTGGCTAAG
ATTAAGTATTAAAAAAAACCAGGCTCTGCCAGGCGCAGTGGCTCATGCCTATAATCCCGGCACTTTGGGAGTCT
GTGGCAGGAGGATTGCTTGAGGCCAGGAGTTTGAGACCAGCCTGGGCAACATAGCGAGACCCCATCTCTACAAA
GATTAAAAATTAGCTGCGTGTAGTAGCATATGCCTTTCAACGTAGCTACTCAGGAGGCTGAGGTGGGAGGATCC
TTGAGCCGAGGAGTTTGTGCTGTCAGTGCAGTATGATCGCACCACTGCATTCCAGACCCCATCTCG

WO 2004/030615

PCT/US2003/028547

2568/6881
FIGURE 2360

MVSHGSSPSLLEALSSDFLACKICLEQLRAPKTLPLHTYCQDCLAQLADGGRVRCPECRETVPVPPEGVASFKT
NFFVNGLLDLVKARACGDLRAGKPACALCPLVGGTSTGGPATARCLDCADDLCQACADGHRCTRQTHTHRVDLV
GYRAGWYDEEARERQAAQCPQHPGEALRFLCQPCSQLCRECRLDPHLDHPCLPPLAEAVRARRPGLEGLLAGVDN
NLVELEAARRVEKEALARLREQAARVGTQVEEAAEGVLRALLAQKQEVLGQLRAHVEAAEEAARERLAELEGREQ
VARAAAFARRVLSLGREAEILSLEGAIAQRLRQLQGCPWAPGPAPCLLPQLELHPGLLDKNCHLLRLSFEEQQP
QKDGKDGAGTQGGEESQSRREDEPKTERQGGVQPQAGDGAQTPKEEKAQTTREEGAQTLEEDRAQTPHEDGGPQ
PHRGGRPNNKKKFKGRLKSIISREPSALGPNLDGSGLLPRPIFYCSFPTRMPGDKRSPRITGLCPFGPREILVAD
EQNRALKRFSLNGDYKGTVPVPVEGCSPCSVAALQSAVAFSASARLYLINPNGEVQWRRALSLSQASHAVAALPSG
DRVAVSVAGHVEVYNMEGSLATRFIPGGKASRGLRALVFLTTSPQGHFVGSDWQONSVVICDGLGQVVGEYKGPG
LHGCQPGSVSVDKKGYIFLTLREVNKVVILDPKGSLLGDFLTAYHGLEKPRVTMVDGRYLVVSLSNGTIHIFRV
RSPDS

WO 2004/030615

PCT/US2003/028547

2569/6881
FIGURE 2361

GAATTCCTGCAGCTCAGCAGCCGCCGCGCCAGAGCAGGACGAACCGCCAATCGCAAGGCACCTCTGAGAACTTCAGG
ATGCAGATGTCTCCAGCCCTCACCTGCCTAGTCCTGGGCCTGGCCCTTGTCTTTGGTGAAGGGTCTGCTGTGCAC
CATCCCCATCCTACGTGGCCACCTGGCCTCAGACTTCGGGGTGAGGGTGTTTCAGCAGGTGGCGCAGGCCCTCC
AAGGACCGCAACGTGGTTTTCTCACCCTATGGGGTGGCCTCGGTGTTGGCCATGCTCCAGCTGACAACAGGAGGA
GAAACCCAGCAGCAGATTCAAGCAGCTATGGGATTCAAGATTGATGACAAGGGCATGGCCCCCGCCCTCCGGCAT
CTGTACAAGGAGCTCATGGGGCCATGGAACAAGGATGAGATCAGCACCACAGACGCGATCTTCGTCCAGCGGGAT
CTGAAGCTGGTCCAGGGCTTCATGCCCCACTTCTTCAGGCTGTTCCGGAGCACGGTCAAGCAAGTGGACTTTTCA
GAGGTGGAGAGAGCCAGATTTCATCATCAATGACTGGGTGAAGACACACACAAAAGGTATGATCAGCAACTTGCTT
GGGAAAGGAGCCGTGGACCAGCTGACACGGCTGGTGTGTTGAATGCCCTCTACTTCAACGGCCAGTGGAAAGACT
CCCTTCCCCGACTCCAGCACCCACCGCCGCTCTTCCACAAATCAGACGGCAGCACTGTCTCTGTGCCCATGATG
GCTCAGACCAACAAGTTCAACTATACTGAGTTCACCACGCCCCGATGGCCATTACTACGACATCCTGGAAGTCCCC
TACCACGGGGACACCCTCAGCATGTTTATTGCTGCCCCCTTATGAAAAGAGGTGCCCTCTCTGCCCCACCAAC
ATTCTGAGTGCCAGCTCATCAGCCACTGGAAAGGCAACATGACCAGGCTGCCCCGCCCTCTGGTTCTGCCCCAAG
TTCTCCCTGGAGACTGAAGTCGACCTCAGGAAGCCCCCTAGAGAACCTGGGAATGACCGACATGTTTCAGACAGTTT
CAGGCTGACTTCACGAGTCTTTCAGACCAAGAGCCTCTCCACGTCGCGCAGGCGCTGCAGAAAGTGAAGATCGAG
GTGAACGAGAGTGGCACGGTGGCCTCCTCATCCACAGCTGTCTAGTCTCAGCCCGCATGGCCCCGAGGAGATC
ATCATGGACAGACCCTTCTCTTTGTGGTCCGGCACAACCCACAGGAACAGTCCTTTTCATGGGCCAAGTGATG
GAACCC**TGA**CCCTGGGGAAAGACGCCTTCATCTGGGACAAAACCTGGAGATGCATCGGGAAAGAAGAACTCCGAA
GAAAAGAATTTTAGTGTTAATGACTCTTTCTGAAGGAAGAGAAGACATTTGCCTTTTGTTAAAGATGGTAAAC
AGATCTGTCTCCAAGACCTTGGCCTCTCCTTGGAGGACCTTTAGGTCAAACCTCCCTAGTCTCCACCTGAGACCCT
GGGAGAGAAGTTTGAAGCACAACCTCCCTTAAGGTCTCCAAACCAGACGGTGACGCTGCGGGACCATCTGGGGCA
CCTGCTTCCACCCGTCTCTCTGCCCCACTCGGGTCTGCAGACCTGGTTCCTGAGGCCCCCTTGCAGGATGGAAC
TACGGGGCTTACAGGAGCTTTTGTGTGCTGGTAGAACTATTTCTGTTCCAGTCACATTGCCACTCACTCTGTGA
CTGCCTGCCACCGCGGAGGAGGCTGGTGACAGGCCAAAGGCCAGTGGAAAGAAACACCCTTTCATCTCAGAGTCCA
CTGTGGCACTGGCCACCCCTCCCCAGTACAGGGGTGCTGCAGGTGGCAGAGTGAATGTCCCCCATCATGTGGCCC
AACTCTCCTGGCCTGGCCATCTCCCTCCCCAGAAACAGTGTGCATGGGTTATTTTGGAGTGTAGGTGACTTGTTT
ACTCATTGAAGCAGATTTCTGCTTCCTTTTATTTTATAGGAATAGAGGAAGAAATGTCAGATGCGTGCCCAGCT
CTTACCCCCCAATCTCTTGGTGGGGAGGGGTGTACCTAAATATTTATCATATCCTTGCCCTTGAGTGCTTGTTA
GAGAGAAAGAGAACTACTAAGGAAAATAATATTATTTAAACTCGCTCCTAGTGTCTTTTGTGGTCTGTGTACC
GTATCTCAGGAAGTCCAGCCACTTGACTGGCACACACCCTCCGGACATCCAGCGTGACGGAGCCACACTGCCA
CCTTGTGGCCGCTGAGACCCTCGCGCCCCCGCGCCCCCGCGCCCCCTCTTTTCCCTTGATGGAAATTGACC
ATACAATTTTCATCCTCCTTCAGGGGATCAAAGGACGGAGTGGGGGACAGAGACTCAGATGAGGACAGAGTGGT
TTCCAATGTGTTCAATAGATTTAGGAGCAGAAATGCAAGGGGCTGCATGACCTACCAGGACAGAACTTTCCCCAA
TTACAGGGTGACTCACAGCCGATTGGTGACTCACTTCAATGTGTCAATTTCCGGCTGCTGTGTGTGAGCAGTGGA
CACGTGAGGGGGGGGTGGGTGAGAGAGACAGGCAGCTCGGATTCAACTACCTTAGATAATATTTCTGAAAACCTA
CCAGCCAGAGGGTAGGGCACAAAGATGGATGTAATGCACCTTTGGGAGGCCAAGGCGGGAGGATTGCTTGAGCCCA
GGAGTTCAAGACCAGCCTGGGCAACATACCAAGACCCCGTCTCTTTAAATATATATATATTTTAAATATACTTA
AATATATATTTCTAATATCTTTAAATATATATATATATTTTAAAGACCAATTTATGGGAGAATTGCACACAGATG
TGAAATGAATGTAATCTAATAGAAGC

WO 2004/030615

PCT/US2003/028547

2570/6881
FIGURE 2362

MQMSPALTCLVLGLALVFGEGSAVHHPPSYVAHLASDFGVRVFQQVAQASKDRNVVFS
PYGVASVLAMLQLTTGG
ETQQQIQAMGFKIDDKGMALRHLYKELMGPWNKDEISTDAIFVQORDLKL
VQGFMPPHFFRLFRSTVKQVDFS
EVERARFIINDWVKTHTKGMISNLLGKGAVDQLTRLVLVNALYFNGQWK
TPFPDSSTHRRLFHKSDGSTVSVPM
MAQTNKFNYTEFTTPDGHYYDILELPYHGDTL
SMFIAAPYEKEVPLSALTNILSAQLISHWKG
NMTRLPRLLVLPK
FSLETEVDLRKPLENLGMTDMFRQFQADFT
SLSDQEPLHVAQALQVKIEVNESGTVASS
STAVIVSARMAPEEI
IMDRPFLFVVRHNPTGTIVLFMGQVMEP

WO 2004/030615

PCT/US2003/028547

2571/6881
FIGURE 2363

GTGGGACGCGCCGAGCCGGAGGCTGCAGGATGATGCGGTTTCATGCTATTATTCAGCCGGCAGGGAAAAC TGCGGC
TGCAAAAATGGTACCTGGCCACTTCGGACAAGGAACGGAAGAAGATGGTGCGCGAGCTCATGCAGGTTGTCTGG
CTCGAAAGCCCCAAGATGTGCAGCTTCCTGGAGTGGAGGGACCTCAAAGTTGTCTATAAGAGATATGCCAGCCTCT
ACTTCTGCTGCGCCATCGAGGGCCAAGACAATGAGCTCATCACACTGGAGCTGATCCACCGATACGTGGAGCTCT
TAGACAAATACTTTGGCAGTGTGTGCGAGCTGGACATCATCTTCAACTTTGAGAAGGCCTACTTCATCCTGGATG
AGTTTTTGTATGGGGGGGGATGTCCAGGACACCTCCACTTTCCCTTTTCCCACTGAAGGTTTTAGAAAGCTAGGAG
GCAGGAAAATGTGACCCAGATGGGGGTGCTATTTGGCTTTTATTCCCTGCCTTTGCAGAACTGATGTCACCCCAG
ATGTCCTTCCCTCCCTAATAACTGTAAATATATAAATATGTCAGGTTAAAGGGAAAAGGTGTTTCAGGGCACTTCT
TGTCTCTCTGTCCCATACCTACCTCCACCTCCCCCTAGCCAGCCAGGCAGCTTCTCTGCCTGGGAGGGGAGC
CTGGACCCCCCTCTTTCTCCTTGGCTGCAGTGGGGCCTTTATCCAGTGCCAGGGAGGAACAACATAGTTAATTTT
TTTCTAACCTTGCCACTTTGAGGGAAGGAAGGGTTGGGGGAAGGGCAAGCTTTATGGGACCCTGGTCCTGGCCCT
GGCCTTTCACTCCAGTTCTGGGTGAGGCAGGAGCTGGGAGGGGTGGGGAGGGGGAGGGGGAAGTGTCTGCCTTTA
TGTCTTTCTTCTGAAATAAAAGGAAAAGCATTCTGGAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2572/6881
FIGURE 2364

MMRFMLLSRQGKRLRLQKWYLATSDKERKKMVRELMQVVLARKPKMCSFLEWRDLKVVKRYASLYFCCAIEGQD
NELITLELIHRYVELLDKYFGSVCELDIIFNFEKAYFILDEFMGGDVQDTSTFPFSH

WO 2004/030615

PCT/US2003/028547

2573/6881
FIGURE 2365

GTGGGACGCGCCGAGCCGGAGGCTGCAGGATGATGCGGTTTCATGCTATTATTCAGCCGGCAGGGAAAACTGCGGC
TGCAAAAATGGTACCTGGCCACTTCGGACAAGGAACGGAAGAAGATGGTGCGCGAGCTCATGCAGGTTGTCCTGG
CTCGAAAGCCCAAGATGTGCAGCTTCCTGGAGTGGAGGGACCTCAAAGTTGTCTATAAGAGATATGCCAGCCTCT
ACTTCTGCTGCGCCATCGAGGGCCAAGACAATGAGCTCATCACACTGGAGCTGATCCACCGATACGTGGAGCTCT
TAGACAAATACTTTGGCAGTGTGTGCGAGCTGGACATCATCTTCAACTTTGAGAAGGCCTACTTCATCCTGGATG
AGTTTTTGTATGGGGGGGGATGTCCAGGACACCTCCAAGAAGAGTGTGCTGAAAGCCATCGAGCAGGCTGACCTAC
TGCAAGAGGAGGATGAGTCGCCACGGAGTGTGCTGGAGGAGATGGGTTTGGCATAGCCCCCTGCTGGGCCGGGGTG
TGGCGATGGGGTCCTGGCAGCGTGGCGGGAACGGCTGCTTCTCCTCTGCCCAGGGCCCTGTTCTTGGTGGGACTC
GGCTGCCCCCTCCTC

WO 2004/030615

PCT/US2003/028547

2574/6881
FIGURE 2366

MMRFMLLFSRQGKLRQLQKWYLATSDKERKKMVRELMQVVLARKPKMCSFLEWRDLKVVKRYASLYFCCAIEGQD
NELITLELIHRYVELLDKYFGSVCELDIIFNFEKAYFILDEFILMGGDVQDTSKKSVLKAIEQADLLQEEDESPRS
VLEEMGLA

WO 2004/030615

PCT/US2003/028547

2575/6881
FIGURE 2367

CCAGCGTGCTGAAGCCGGAGCGAGCTAGCCGCCCGGAGCCGCGCCGACCCAGCTGAGCCCAGCCCACGGGACGCC
AGACCTCGACCGTCGCTCCTACCCCGGCCACCGCTCGGAGCCGAGGCGGACGCGTCCCGATCTTCCCCTGTCCCC
ACCCTGCCCGGACCTCCTCTCCACCTCTCGCGTCGTGACACCAGCGTCTCCGGCAGCCTCTTGGTCAATGAAAGC
CCTCAGATTGTGGGCTTCCGCCCTCTTCTGCCCTTCTGCTGATCAACGGGTAGGGGCAGCACCCCTGGTCGCCC
TGAGGCGCAGCCTCCTCCTCTCAGCTCTGAGCATAAAGAGCCGGTAGCCGGGGACGAGTGCCCGGGCCAAAGGA
TGGCAGCGCCCCAGAGGTCCGAGGCGCTCGGAATTCCGAGCCGAGGACGAGGGAGAGCTTTTCCAGGGCGTGGA
TCCCCGGGCGCTGGCCGCGGTGCTGCTGCAGGCACTCGACCGTCCCGCCTCACCCCGGCCACCAAGCGGCTCCCA
GCAGGGGCCCGGAGGAAGAAGCAGCTGAAGCTCTGCTGACCGAGACCGTGCGCAGCCAGACCCACAGCCTCCCGGC
GCCGGAGAGCCCGGAGCCCGCGGCTCCGCTCGCCCTCAGACTCCGGAGAATGGGCCCCGAGGCGAGCGATCCCTC
CGAGGAGCTCGAGGCGCTAGCGTCCCTGCTCCAGGAATGCGAGATTTAGTCCAAGTAGCGCCAAGCGCCAGCA
GGAGACGGCGGCAGCAGAGACGGAAACCCGCACGCACACGCTGACCCGAGTGAATCTGGAGAGCCCGGGGCCAGA
GCGCGTATGGCGCGCTTCTTGGGAGAGTTCCAGGCGCGTGTCCCGAGCGCGCGCCCCGCGCCCCCGGGCCCC
CTCTCAATTCCAGGCGCGTATGCCCGACAGCGGGCCCCCTTCCCGAAAACCCACAAGTTCGGGGGAAGGAGTGTCTC
CCCCAAAACACACCTAGGCGAGGCATTGGCACCCCTGTCCAAGGCGTACCAAGGCGTGGCCGCCCGCTTCCCCAA
GGCGCGCCGGCCGGAGAGCGCACTCCTGGGCGGCTCCGAGGCGGGCGAGCGCCTTCTCCAGCAAGGGCTGGCGCA
GGTGGAGGCCGGGCGGCGGAGGCGGAGGCCACGCGGAGGCGCGGCGCAGGAAGAGCGGCTGGCCGACCTCGC
CTCGGACCTGCTGCTCCAGTATTTGCTGCGAGGCGGGGCCCCGGCAGCGCGGCTCGGGGGTTCGGGGGCTGCAGGA
GGCGGCGGAGGAGCGAGAGAGTGCAAGGGAGGAGGAGGAGGCGGAGCAGGAGAGACGCGGCGGGGAGGAGAGGGT
GGGGGAAGAGGATGAGGAGGCGGCCGAGGCGGAGGCGAGGCGGAGGAGGCGGAGAGGGCGCGCAGAACGCGCT
CCTGTTTCGGGAGGAGGAGGACGGGGAAGCCGCGCCGAGGACAAGCGCTCCAGGAGGAGACGCCGGGCCACCG
GCGGAAGGAGGCCGAGGGGACAGAGGAGGGCGGGGAGGAGGAGGACGACGAGGAGATGGATCCGCAGACGATCGA
CAGCCTCATTTAGCTGTCCACCAAACCTCCACCTGCCAGCGGACGACGTGGTCAGCATCATCGAGGAGGTGGAGGA
GAAGCGGAAGCGGAAGAAGAAGCGCCCTCCCGAGCCCGTGCCGCCCCCGGTGCCGCCCCCGCCCCACCCACGT
CCGCTCCCCCGAGCCCCCGCCCCCGCCCCGCTCCCGCACGAGACGAGCTGCCGGACTGGAACGAGGTGCTCCC
GCCCTGGGATCGGGAGGAGGACGAGGTGTACCCGCCAGGGCCGTACCACCTTTCCCCAACTACATCCGGCCGCG
GACACTGCAGCCGCCCTCGGCCTTGCGCCGCCGCACTACCACACGCCTTGCCGCCTTCGCGCCACTATCCCGG
CCGGGAGGCCCAGGCGCGGCGCGCAGGAGGAGGCGGAGGCGGAGGAGCGCCGGCTGCAGGAGCAGGAGGAGCT
GGAGAATTACATCGAGCACGTGCTGCTCCGGCGCCCGTGACTGCCCTTCCCGGTCCCGCCCCGCGCGCCCCGCG
CGCGCGCGCGCGCGCGCCCCCTCCGTGTTGCCCGCTCCCCCTCGGTGTTTGATGCGCCCCGGCCCTGCCCC
TTGGCCCTGCCCCGTGCCCCGGGTGCGTCCGGACCTGCCAGACCCCCCTCCCGGGTCTGAGCCGAACCTCCA
GAGCTACCCGCGGGTGACCGGGGGCCAGCCAGGAGGGCGGGTGGTTTGTGCGAGTTCCCTTGCCACGCGGGG
CCCGGCCCATCAAGTCCCTCTGGGGACGTCCCGTCGGAAACCGGAAAAAGCAGTTCCAGTTAATTGTGTGAAG
TGTGTCTGTCTCCAGCCCTTCGGGCTCCACGAGCCCCCTCCAGCCTCTCCAAGTCGCTGTGAATTGACCCCTTC
TTTCCTTTCTCTGTTGTAAATACCCCTCACGGAGGAAATAGTTTTGCTAAGAAATAAAAGTGAATTTT

WO 2004/030615

PCT/US2003/028547

2576/6881
FIGURE 2368

MKALRLSASALFCLLLINGLGAAPPGRPEAQPPPLSSEHKEPVAGDAVPGPKDGSAPVVRGARNSEPQDEGELFQ
GVDPRALAAVLLQALDRPASPPAPSGSQQGPEEEAAEALLTETVRSQTHSLPAPESPEPAAPPRPQTPENGPEAS
DPSEEELEALASLLQELRDFSPSSAKRQQETAAETETRTHTLTRVNLESFGPERVWRASWGEFQARVPERAPLPP
PAPSQFQARMPDSGPLPETHKFGEGVSSPKTHLGEALAPLSKAYQGVAAPFPKARRPESALLGGSEAGERLLQQG
LAQVEAGRROAEATRQAAAEERLADLASDLLLYLLQGGARQRLGGRGLQEAAEERESAREEEAEQERRGGE
ERVGEEDDEAAEAEAEAEAEERARQNALLFAEEEDGEAGAEDKRSQEETPGHRRKEAEGTEEGGEEEDDEEMDPQ
TIDSLIELSTKLHLPADDVVSIIIEVEEKRRKKKNAPPEFVPPFRAAPAPTHVRSPQPPPPAPAPARDELPDWNE
VLPPWDREEDVYPPGPYHPFPNYIRPRTLQPPSALRRRRHYHHALPPSRHYPGREAQARRAQEEAEAEERRLQEQ
EELNYIEHVLLRRP

WO 2004/030615

PCT/US2003/028547

2577/6881
FIGURE 2369

GGCACGAGGGCTTCCACATGTGTCAAGCGGCTGGCTCAGCCCAGAGTCCCTGTCTCCCGCCCGCCGGCCCGAGCC
GCCGCCCCCTCCCCGCCTCCCGTGCGCCCGGACAAATCCTCGCCTTGCTGTGGCGCCGGCACTCTGGAGCTTTCT
GTAGCCTCCGGATACGCCTTTTTTTCAGGGCGTAGCCCCAGCCAAGCTGCTCCCCGCGGCGGCCGCACAGCAGCC
CGAGCGCCCCCTTTCCGGAGCTCCCTCCGGAGCTGGGATCCAGGCGCTAGCGGAGATCCCAGGATCCTGGGTG
CTGTCTGGGCCCGCTCCCCACCATGACCTCCTCGGGGCTGGACCCCGGTTCTGTCTGCTGCTGCCGCTGCTGCT
GCCCCCTGCGGCCTCAGCCTCCGACCGGCCCGGGGCCGAGACCCGGTCAACCCAGAGAAGCTGCTGGTGATCAC
TGTGGCCACAGCTGAAACCGAGGGGTACCTGCGTTTTCTGCGCTCTGCGGAGTTCTTCAACTACACTGTGCGGAC
CCTGGGCCTGGGAGAGGAGTGGCGAGGGGGTGATGTGGCTCGAACAGTTGGTGGAGGACAGAAGGTCCGGTGGTT
AAAGAAGGAAATGGAGAAATACGCTGACCGGGAGGATATGATCATCATGTTTGTGGATAGCTACGACGTGATTCT
GGCCGGCAGCCCCACAGAGCTGCTGAAGAAGTTCGTCCAGAGTGGCAGCCGCTGCTCTTCTCTGCAAGAGCTT
CTGCTGGCCCCGAGTGGGGGCTGGCGGAGCAGTACCCTGAGGTGGGCACGGGGGAAGCGCTTCTCAATTCTGGTGG
ATTTCATCGGTTTTTGCCACCACCATCCACCAAATCTGCGCCAGTGGAAAGTACAAGGATGATGACGACGACCAGCT
GTTCTACACACGGCTCTACCTGGACCCAGGACTGAGGGAGAAACTCAGCCTTAATCTGGATCATAAGTCTCGGAT
CTTTCAGAACCCTCAACGGGGCTTTAGATGAAGTGGTTTTAAAGTTTGATCGGAACCGTGTGCGTATCCGGAACGT
GGCCTACGACACGCTCCCCATTGTGGTCCATGGAAACGGTCCCCTAAGCTGCAGCTCAACTACCTGGGAAACTA
CGTCCCCAATGGCTGGACTCCTGAGGGAGGCTGTGGCTTCTGCAACCAGGACCGGAGGACACTCCCGGGGGGCA
GCCTCCCCCCCCGGGTGTTTTCTGGCCGTGTTTGTGGAACAGCCTACTCCGTTTCTGCCCCGCTTCTGCAAGCGCT
GCTACTCCTGGACTATCCCCCGACAGGGTCACCCTTTCTGTCACAACAACGAGGTCTTCCATGAACCCACAT
CGCTGACTCCTGGCCGACGCTCCAGGACCACTTCTCAGCTGTGAAGCTCGTGGGGCCGGAGGAGGCTCTGAGCCC
AGGCGAGGCCAGGGACATGGCCATGGACCTGTGTGCGGAGGACCCGAGTGTGAGTTCTACTTCAGCCTGGACGC
CGACGCTGTCTCACCACCTGCAGACCTGCGTATCCTCATTGAGGAGAACAGGAAGGTGATCGCCCCATGCT
GTCCCGCCACGGCAAGCTGTGGTCCAACCTTCTGGGGCGCCCTGAGCCCCGATGAGTACTACGCCGCTCCGAGGA
CTACGTGGAGCTGGTGCAGCGGAAGCGAGTGGGTGTGTGGAATGTACCATACATCTCCCAGGCCTATGTGATCCG
GGGTGATACCTTGGGATGGAGCTGCCCCAGAGGGATGTGTTCTCGGGCAGTGACACAGACCCGGACATGGCCTT
CTGTAAGAGCTTTCGAGACAAGGGCATCTTCTCCATCTGAGCAATCAGCATGAATTTGGCCGGCTCCTGGCCAC
TTCCAGATACGACACGGAGCACCTGCACCCCGACCTCTGGCAGATCTTCGACAACCCCGTCGACTGGAAGGAGCA
GTACATCCACGAGAACTACAGCCGGGCCCTGGAAGGGGAAGGAATCGTGGAGCAGCCATGCCCGGACGTGTACTG
GTTCCCACTGCTGTGAGAACAAATGTGTGATGAGCTGGTGGCAGAGATGGAGCACTACGGCCAGTGGTCAGGCGG
CCGGCATGAGGATTCAAGGCTGGCTGGAGGCTACGAGAAATGTGCCCACCGTGGACATCCACATGAAGCAGGTGGG
GTACGAGGACCAGTGGCTGCAGCTGCTGCGGACGTATGTGGGCCCCATGACCGAGAGCCTGTTTCCCGGTTACCA
CACCAAGGCGCGGGCGGTGATGAACCTTGTGGTTCGCTACCGGCCAGACGAGCAGCCGTCTCTGCGGCCACACCA
CGACTCATCCACCTTACCCTCAACGTTGCCCTCAACCACAAGGGCCTGGACTATGAGGGAGGTGGCTGCCGCTT
CCTGCGCTACGACTGTGTGATCTCCTCCCCGAGGAAGGGCTGGGCACTCCTGCACCCCGGCCGCTCACCCTA
CCACGAGGGGCTGCCAACGACCTGGGGCACACGCTACATCATGGTGTCTTTGTGACCCCTTGACTCAACCAC
TCTGCCAAACCTGCCCTGCCATTGTGCCTTTTTAGGGGGCCTGGCCCCCGTCTGGGAGTTGGGGGATGGGTCTC
TCTGCTCCCCACTTCTGAGTTCATGTTCCGCGTGCCTGAACCTGAATATGTACCTTGCTCCCAAGACACGGCC
CTCTCAGGAAGCTCCCGGAGTCCCCGCTCTCTCTCTCCGCCACAGGGGTTCTGGGCACAGGGCTTCTGGGGAC
TCCCCGCTGATAAATTATTAATGTTCCGCGAGTCTCACTCTGAATAAAGGACAGTTTGTAAAAAAAAAAAAAAAA
AA

WO 2004/030615

PCT/US2003/028547

2578/6881
FIGURE 2370

MTSSGPGPRFLLLLPLLLPPAASASDRPRGRDPVNPEKLLVITVATAETEGYLRFLRSAEFFNYTVRTLGLGEEW
RGGDVARTVGGGQKVRWLKKEMEKYADREDMIIMFVDSYDVILAGSPTELLKKFVQSGSRLLFSAESFCWPEWGL
AEQYPEVGTGKRFLNSGGFIGFATTIHQIVRQWKYKDDDDQLFYTRLYLDPGLREKLSLNLDHKSRIQNLNGA
LDEVVLKFDNRNRVIRNVAYDTLP IVVHGNGPTKLQLNYLGNYVPNGWTPEGGCGFCNQDRRTLPGGQPPPRVFL
AVFVEQPTPFLPRFLQRLLLLDYPPDRVTFLHNNNEVFHEPHIADSWPQLQDHFSAVKLVGPPEEALSPGEARDMA
MDLCRQDPECEFYFSLDADAVLTNLQTLRLILIEENRKVIAPMLSRHGKLWSNFWGALSPDEYYARSEDYVELVQR
KRVGVWNVPIYSQAYVIRGDTLRMELPQRDVFSGSDTDPDMAFCKSFRDKGIFLHLSNQHEFGRLLATSRDYDEH
LHPDLWQIFDNPVDWKEQYIHENYSRALEGE GIVEQPCPDVYWFPLLSEQMCDELVAEMEHYQWSGGRHEDSRL
AGGYENVPTVDIHMKQVGYEDQWLQLLRTYVGPMTESLFPGYHTKARAVMNFVVRYPDEQPSLRPHHDSSTFTL
NVALNHKGLDYE GGGCRFLRYDCVISSPRKGWALLHPGRLTHYHEGLPTTWGTRYIMVSFVDP

WO 2004/030615

PCT/US2003/028547

2579/6881
FIGURE 2371

GCAGTTTATTCCGACAGTTGTGTTGTGCCAATGGTGGAGAAGAAAACCTTCGGTTCGCTCCCAGGACCCCGGGCAG
CGGCGGGTGCTGGACCGGGCTGCCCGGCAGCGTCGCATCAACCGGCAGCTGGAGGCCCTGGAGAATGACAACTTC
CAGGATGACCCCCACGCGGGACTCCCTCAGCTCGGCAAGAGACTGCCTCAGTTTGATGACGATGCGGACACTGGA
AAGAAAAAGAAGAAAACCCGAGGTGATCATTTTAAACTTCGCTTCCGAAAAAACTTTCAGGCCCTGTTGGAGGAG
CAGAACTTGAGTGTGGCCGAGGGCCCTAACTACCTGACGGCCTGTGCGGGACCCCCATCGCGGCCCCAGCGCCCC
TTCTGTGCTGTCTGTGGCTTCCCATCCCCCTACACCTGTGTCAGCTGCGGTGCCCGGTACTGCACTGTGCGCTGT
CTGGGGACCCACCAGGAGACCAGGTGTCTGAAGTGGACTGTGTGAGCCTGGGCATTCCCAGAGAGGAAGGGCCGC
TGTGCACTGCCCCGCCCTTCAGAAAGACAGAATTTATCACCCAATGCAGGGGGAGCTCTTCCTGGACCAAGGGAG
GAGCCGCTCATTACCCAAACAAAACCTGTGTCTTATCTGCCAGGAAAGACCAGCCTCACTCCTGGGAACTGTCTGG
CAGGTAGGCTGGGCCCCCAGTGCTGTTAGAATAAAAAAGCCTCGTGCCGG

WO 2004/030615

PCT/US2003/028547

2580/6881
FIGURE 2372

MVEKKTSVRSQDPGQRRVLDRAARQRRINRQLEALENDNFQDDPHAGLPQLGKRLPQFDDADTGKKKKKTRGDH
FKLRFRKNFQALLEEQNLSVAEGPNYLTACAGPPSRPQRPFCAVCGFPSPYTCVSCGARYCTVRCLGTHQETRCL
KWTIV

WO 2004/030615

PCT/US2003/028547

2581/6881
FIGURE 2373

ATATACTTGC GCGCCGACGCCGCCGCTCGCTTGTGAAACTGGAAGGCTGCCATGGCTAGCCAGCCGCTCCTCG
GTGCGACCACCGAGGCCCAAGAAAGAGCCGCAGACGCTCGTCATCCCCAAGAATGCGGCGGAGGAGCAGAAGCTC
AAGCTGGAGCGGCTCATGAAGAACCCGGACAAAGCAGTTCCAATTCCAGAGAAAATGAGTGAATGGGCACCTCGA
CCTCCCCCAGAATTTGTCCGAGATGTCATGGGTTCAAGTGCTGGGGCCGGCAGTGAGAGTTCCACGTGTACAGA
CATCTGCGCCGGAGAGAATATCAGCGACAGGACTACATGGATGCCATGGCTGAGAAGCAAAAATTGGATGCAGAG
TTTCAGAAAAGACTGGAAGAAATAAAATTGCTGCAGAGGAGCAGACCGCAAAGCGCCGGAAGAAGCGCCAGAAG
TTAAAAGAGAAGAAATTACTGGCAAAGAAGATGAAACTTGAAACAGAAGAAACAAGAAGGACCCGGTCAGCCCAAG
GAGCAGGGGTCCAGCAGCTCTGCGGAGGCATCTGGAACAGAGGAGGAGGAGGAAGTGCCAGTTTCACCATGGGG
CGATGACAAATGTTTGCCACAGCCTCTGCCTGGAACCTGGCTCGTGCTGTGACCAGAAGGGAAAGGCGGCTGTTTG
GCTCTTTCTCCCCGCAAGGACCCGCTGACCCGCTGGATGGAGAGCAAAGGAGACCCCTCCCGAGCCGCTCACAG
TCCTGTATTTGGCAGGTTTGGGAGCCTGAGGGGCCATCTCCCTGACACTCAGAGGCACTGCCTTGACAGACCAT
CCGTGCTCCTGGTAAAGGGGGACAGAGAGCCTCACCTTGCCACATATTTGAACAGTGATGAGTTTGGGGCTGGTT
TCTGGGAAGGGAACGTTTATTTAGTAAAGAGCAGAACACCCCTTGCGTTTTGTTGGGACATGTGGACCGTGAGTCG
CAAACACTCTGGAGAAGGCTGAGATGCCACCATTTCCACGGGGACTGAAGACACATTACGTGGACCTGGTCCCAG
GCTCAGTGAGGAGATGGCCTCAGCTGTGGGGCTGGTCCATGTTGCCCCTCACTCCAGTGGGAAGTGGGGACCAC
GCCATAGAGGGTCTGCTCCCACTGCAGCTCCCGGTGCTCTCGTGTTCTGGGAAGGCCTGGGTGTGTGCACAAGGA
GGCCCGGGCCAGGGACTTCACCAGGGGCTGGGTCAACAAGGGCACAGGGTGTGTGGAAGCGCTGTGGGGGAAGAG
CCGGTCACCGGAGAGTGAGCAGGCGGAGACTCCAAGCTGGGCTGAGCCAGAGCAGAAGGCGAGGGATTCCCAGCC
GGACGGGGGTTCTCTACCAACAGCTGTGATTTTCATCCGAAGTGGAAGGGGGTCTAAACAGAACAGGCTGAGAG
AGGCGGGACTGGGTCAAGTGGGTGGAGCTCCTCCTTGATGACTGCAACTGTGCGGGCTTTCCGCGGCTCACAG
CAGTTGGGGCCAGCGGGGAGAAGAGAGGCGGAACCTGCTGTGTCTCACGTGGCGCAGCCTCAAACCTGGCATCCAG
GCACTGGGCCCCGTGCAGAGAAGGCACCTGCAGAGAGCAGGGCAGCCCGGCGCAGGGGCATGCGCCTAGAATCCCA
GCTACTCGGAAGGCCAAGGCAGGAGGACCGCTTGAGTCCAGGGATTCAAGGCCAACCTGGGCAATAGAGCGAGAC
CCTGTCTCTTAAAAAACGATGATGATGAACACAGAGGACGGGGCACTGTGCTGGGAGCCAGGGGGCTGGGAGGA
GCCGAGACCAGCCTTTTACCTCGGGGTTTTGAGGCCAACAGGGACGACAGAGACAGTTTCTAGTTAGAGCCTTGG
CTCCATTTTTGGATGATTTAGCCCCGAGTTCTGAGTCTATTTTATGCCCCCTTACGTACTTTGATAGAACTAAGG
AAATAGTGGTTTTGAGTGAAGGGAAAGGAAACCCAGAAACATTTTACGTTGCTTTTACTTCTGTAGTGTAGATTG
CCCCGGCCCCCTCTCTGAGCCCTGTAGCATCTGTGATAGCTTCTGTCCCTTCATCGGTTTCATGTACAGGGATTTT
CTTTCCCAGGAAGCGGACACGGAGAGTCAGCCCTAATAAATGAGCACATGCCCTGGCTGTACATTTTGAAACCTG

WO 2004/030615

PCT/US2003/028547

2582/6881
FIGURE 2374

MASPAASSVRPPRPKKEPQTLVIPKNAAEEQKLKLERLMKNPDKAVPIPEKMSEWAPRPPPEFVRDVMGSSAGAG
SGEFHVYRHLRRREYQRQDYMDAMAEKQKLDAEFQKRLEKNKIAAEEQTAKRRKKRQKLKEKKLLAKMKLEQKK
QEGPGQPKEQGSSSSAEASGTEEEEVPSFTMGR

WO 2004/030615

PCT/US2003/028547

2583/6881
FIGURE 2375

CGCTCGGCGCCCCGGCCGGGCCACTGGGCCACAGGCCACGCGGCCACGCAGTCCGAGCGGGAGCCGAGCCGGGCG
GGGCGAGGGCAGCTCCGGAACGTCCCAGGGATGGAAGTGCTTGGATGCGGTGCTGCTGGCTGCGGATGTGCGCAA
GGAGATGGGATGGAGAGCCTGAGTTGGCATTTCGTATAAATGACCTGCCTGGCTCCCAACATGAGTGCTGAGCTTA
ACGTGCCTATCGACCCCTCTGCTCCTGCCTGCCCTGAGCCCGGCCATAAGGGCATGGATTACCGGGGACTGGGTCC
GCCGAGCTACCTGGAACGTGGTCACCTCTAACCACCACTCGGTACAGGCCCTGTGCTGGCGGAAGCTCTACCTGA
GCAGGGCCAAGCTGAAGGCCCTCCAGCAGGACCTCCGCCCTCCTCTCCGGCTTTGCCATGGTGGCCATGGTGGAGG
TGCAGCTGGAGACGCAGTACCAGTACCCGCGGCCGCTGCTGATTGCCTTCAGCGCCTGCACCACGGTGCTGGTGG
CCGTGCACCTGTTTCGCCCCTCCTCATCAGCACCTGCATCCTGCCCAATGTGGAGGCCGTGAGCAACATCCACAACC
TGAACCTCCATCAGCGAGTCCCCGCATGAGCGCATGCACCCCTACATCGAGCTGGCCTGGGGCTTCTCCACCGTGC
TTGGCATCCTACTCTTCCTGGCCGAGGTGGTGCCTGCTGCTGCTGGATCAAGTTCCCTCCCCGTGGATGCCCGGCC
AGCCTGGCCCCCACCTGGCCCTGGGAGTCACACGGGCTGGCAGGCCGCCCTGGTGCTCCACCATCATCATGGTGC
CCGTGGGCCTCATCTTCGTGGTCTTACCATCCACTTCTACCGCTCCCTGGTGCGCCACAAAACGGAGCGCCACA
ACCGCGAGATCGAGGAGCTCCACAAGCTCAAGGTCCAGCTGGACGGGCATGAGCGCAGCCTGCAGGTCTTGTGAG
GGGCCGAGGGCCGGGGCTGGGAGCGGCCCTGTGCCCGGGAGTCCGCGAGGGCGGGGATTTGTGAGATGCAGACAT
TTTGCAAGGCTGCCGGGTAGTTCAAGACCAAAGTTTCTCTTGTCTTAATACCATAAGGACTGGATGACTTCTC
CTGAGATAGAACCGTTTGGTTCAATGAGGGACTGTGTTGCTAAGAGCGTTGGGGGCAAAGCCAGGCTGGTTCCTT
GGCCTCGGGGTTTCTGGGTGCGGGACACGGTGAAGAGGCTCCAGCGGGACCTGCCCATCAGTCTGGGCCAGGA
GGGGCTCCAAGCAGCACCCAGCGGTCCGGGGGAGTCTCAGACCCGGCATGCGTGGCTGGCAGACCTGGGAGAGCC
AGGGCAGGGTTTTCGTTTCAGAGAAGGATTGCCCCAGAGACCCGTGGTGGACTTCATGGGTGCTGAGTGGCCCGT
GTGACAGTGATGACACGAAGGCTTCGGCGTTTGTGAGTGGGTGCAGGTGCACGCCAGGGCTTGGTGCTTCCCTGCCT
GGCCCTGGAGGGAGCTGGGTGGCCTGGCTTCAGGGGAAGACAGGAGCCAGGACACACGTAGCCAGCAGGTGTG
GGGGGTGCTGCAGCCCTCGGCAGTGGGGTCAGGCCCTGGGGGATGTTTCCAATGGTGGGCAGCCTGGCCAGGCCG
GAGAAGACATGTTACGGGCATCTATCAGATGCCCCCTTGAGGAGGCTGAGTTATTTGAGGGCTGCTGCAAAGTA
CGCTAGGCTCAAATTTCTTTTTCCAGCCAGAGCCCTGGCCACACGGACTCAGAGGGGCCACCGGGGTGGGGAAA
GGACCCCTCCCCACCCCCCGCAGCCACTGGCCTCCAGCTCTCGGCCACAGAATGGCCTCTAAGGCTGACTCAGC
CACTCCCTTGGGCTGTGGCAGCAGGAGGCGGGGGCTCTGGCTCAGGCCCCGGAGCCTGTGCAGCTTGCCCATGGC
CCTAGGCAGCGAGGGGACAGCCTGGGGGACTTCCTGCCTAGGCAAGGTCAATTGGCCGGGCCTGGCCTGTGGATAG
TGGGGCCAGGGGCCGGCCAGGCCAAATGAGTGCCCTCCTTGTTATGACACCAAGTGACTACAAGGGAGGCAAGA
CCCCCTCAGGCCTCTCAGCCGACACTGGGTCCCACACACAGTGACTGTGCCGTGCAGTGCAGGTTCTGGCCT
TTTCTTGAAGGCATCTGGTAGACCCGAAGCCACGCTCTCGGGCCGCACATGCACGCCGAGCACCAGCTGCCCT
GAGCTGCTTGTACAACCAAACACCTTTCCCTCTTCTCCAGCTGTAACCTGGAGAGTCAGCCATGCCTTGTCTTT
TGTTCTCATAAATAGTCACTGGGGCCGGGCGCAGTGACTCACGCCTGTAATCCAGCACTTTGGGAGGCCTAGGT
GGGCGGATCACTTGAGGTGAGGATTCGAGACCAAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAAAT
ACAGAAAATTAGCTGGGCGTGGTGGCGGGCGCCTGTAGCCCCAGCTACTTGGGAGGCTGAGGCGGGAGAATGGCA
ATGGCGTGAACCCGGGAGGCAGAGCTTGACAGTGGATGGCGCCACTGCACTCCAGCCTGGGCGACAGAGC
CAGACTCCATCTC

WO 2004/030615

PCT/US2003/028547

2584/6881
FIGURE 2376

CGGCGGTGGCGGACACTTGGGGTCTGGACGCAACGGCGGGGAGCATGAACGCCCCTCCAGCCTTCGAGTCGTT
CTTGCTCTTCGAGGGCGAGAAGATCACCATTAAACAAGGACACCAAGGTACCCAATGCCTGTTTATTCACCATCAA
CAAAGAAGACCACACACTGGGAAACATCATTAAATCACGTGCCTGCTTCCCCTTCGCCTTCTGCCGTGATTGTCA
GTTTCCTGAGGCCTCCCCAGCCACGCTTCCTGTACAGCCTGCAGAACTCTGCCCCAGAGCACATCAGCTATGTGC
CCCAGCTCTCAAACGACACCTTGGCGGGGAGGCTCACCTGTCCACCTTCACGCTGGAGCAGCCTCTAGGCCAGT
TCAGCAGCCACAACATCTCTTGA

WO 2004/030615

PCT/US2003/028547

2585/6881
FIGURE 2377

MNAPPAFESFLLFEGEKITINKDTKVPNACLF TINKEDHTLGNI IKS RACFPFAFCRDCQFPEAS PATLPVQPAE
LC PRAHQLCAPALKRHLGGEAHPVHLHAGAASRPVQQPQHL

WO 2004/030615

PCT/US2003/028547

2586/6881
FIGURE 2378

CCATTGTGCTCTAAAGGGAAGGTGCTGTGTAATCATTAAAGGAGCGGAGGCTTTTGGAGCTGCTAAAATGCCGGAT
TACCTCGGTGCCGATCAGCGGAAGACCAAAGAGGATGAGAAGGACGACAAGCCCATCCGAGCTCTGGATGAGGGG
GATATTGCCCTTGTTGAAAACCTTATGGTCAGAGCACTTACTCTAGGCAGATCAAGCAAGTTGAAGATGACATTGAG
CAACTTCTCAAGAAAATTAATGAGCTCACTGGTATTAAAGAATCTGACACTGGCCTGGCCCCACCAGCACTCTGG
GATTTGGCTGCAGATAAGCAGACACTCCAGAGTGAACAGCCTTTACAGGTTGCCAGGTGTACAAAGATAATCAAT
GCTGATTCGGAGGACCCAAAATACATTATCAACGTAAAGCAGTTTGCCAAGTTTGTGGTGGACCTTAGTGATCAG
GTGGCACCTACTGACATTGAAGAAGGGATGAGAGTGGGCGTGGATAGAAATAAATATCAAATTCACATTCCATTG
CCTCCTAAGATTGACCCAACAGTTACCATGATGCAGGTGGAAGAGAAACCTGATGTCACATACAGTGATGTTGGT
GGCTGTAAGGAACAGATTGAGAACTGCGAGAAGTAGTTGAAACCCCATTTACTTCATCCAGAGAGGTTTGTGAAC
CTTGGCATTGAGCCTCCCAAGGGCGTGCTGCTCTTTGGTCCACCCGGTACAGGCAAGACACTCTGTGCGCGGGCA
GTTGCTAATCGGACTGATGCGTGCTTCATTGAGTTATTGGATCTGAGCTTGACAGAAATACGTCGGTGAGGGG
GCTCGAATGGTTTCGTGAACCTCTTTGAAATGGCCAGAACAAAAAAGCCTGCCTTATCTTCTTTGATGAAATTGAT
GCTATTGGAGGGGGCTCGTTTTGATGATGGTGCTGGAGGTGACAATGAAGTGCAGAGAACAAATGTTGGAACCTGATC
AATCAGCTTGATGGTTTTGATCCTCGAGGCAATATTAAAGTGCTGATGGCCACTAACAGACCTGATACTTTGGAT
CCAGCACTGATGAGGCCAGGGAGATTGGATAGAAAAATTGAATTTAGCTTGCCCGATCTAGAGGGTCGGACCCAC
ATATTTAAGATTACGCTCGTTCAATGAGTGTTGAAAGAGATATCAGATTTGAACTGTTAGCACGACTGTGTCCA
AATAGCACTGGTGCTGAGATTAGAAGCGTCTGCACAGAGGCTGGTATGTTTGCCATCAGAGCACGGCGAAAAATT
GCTACCGAGAAGGATTTCTTGGAAGCTGTAAATAAGGTCATTAAGTCTTATGCCAAATTCAGTGCTACTCCTCGT
TACATGACATACAACCTGAACCCCTGAAGGCTTTCAAGTGAAAACCTTTAAATTGGAATCCTAACCTTATATAGACTT
GTTAATAACCAATTCATAAACAAATAAATGGCTTCACTTTAGAGCACAATGG

WO 2004/030615

PCT/US2003/028547

2587/6881
FIGURE 2379

MPDYLGADQRKTKEDKDDKPIRALDEGDIALLKTYGQSTYSRQIKQVEDDIQQLLKKINELTGIKESDTGLAPP
ALWDLAADKQTLQSEQPLQVARCTKIINADSEDPKYIINVKQFAKFVVDLSQVAPTDIEEGMRVGVDNRKYQIH
IPLPPKIDPTVTMMQVEEKPDVTYSVGGCKEQIEKLREVVETPLLHPERFVNLGIEPPKGVLLFGPPGTGKTLC
ARAVANRTDACFIRVIGSELVQKYVGEARMVRELFEMARTKKACLIFFDEIDAIGGARFDDGAGGDNEVQRTML
ELINQLDGFDPGRGNIKVLMATNRPDTLDPALMRPGRDRKIEFSLEPDLEGRTHIFKIHARSMSVERDIRFELLAR
LCPNSTGAEIRSVCTEAGMFAIRARRKATEKDFLEAVNKVIKSYAKFSATPRYMTYN

WO 2004/030615

PCT/US2003/028547

2588/6881
FIGURE 2380

CTTTCCCTCTGCCAACATGGCGGCCTCAGCAAAAAGAAGAATAAGAAGGGGAAGACTATCTCCCTAACAGACTT
TCTGGCTGAGGATGGGGGTACTGGTGGAGGAAGCACCTATGTTTCCAAACCAGTCAGCTGGGCTGATGAAACGGA
TGACCTGGAAGGAGATGTTTCTACAACCTTGGCACAGTAACGATGACGATGTGTACAGGGCGCCTCCAATTGACCG
TTCCATCCTTCCCCTGCTCCACGGGCTGCTCGGGAACCCAATATCGACCGGAGCCGTCTTCCCAAATCGCCACC
CTACACTGCTTTTCTAGGAAACCTACCCTATGATGTTACAGAAGAGTCAATTAAGGAATTCTTTCGAGGATTAAA
TATCAGTGCAGTGCCTTTACCACGTGAACCCAGCAATCCAGAGAGGCTGAAAGGTTTTGGTTATGCTGAATTTGA
GGACCTGGATTCCCTGCTCAGTGCCCTGAGTCTCAATGAAGAGTCTCTAAGTAACAGGAGAATTCGAGTGGACGT
TGCTGATCAAGCACTGGATAAAGAGTATCGAGATCGTTATGATTACAGACCGGTATCGGGATGGGTATCGGGATGG
CCCACGCCGGGATATGGATCGATATGGTGGCCGGGATCGCTATGATGACCGAGGCAGCAGAGACTATGATAGAGG
CTATGATTCCCGGATAGGCAGTGGCAGAAGAGCATTGTCAGTGGGTATCGCAGGGATGATGACTACAGAGAAGG
CAGGGACTGCTATGAAGACCAATATGACAGACGGGATGATCGGTCTGGAGCTCCAGAGATGATTACTCTCGGGA
TGATTATAGGCGTGATGATAGAGGTCCCCCCCCCCCCAAAGACCCAACTGAATCTAAAGCCTCGGAGTACTCCT
AAGGAAGATGATTCTCTGCTAGTAACTCCAGTCCACTCGAGCTGCTTCTATCTTTGGAGGGGCAAAGCCTGTT
G

WO 2004/030615

PCT/US2003/028547

2589/6881
FIGURE 2381

CCTAACAGACTTTTCTGGCTGAGGATGGGGGTACTGGTGGAGGAAGCACCTATGTTTCCAAACCAGTCAGCTGGGC
TGATGAAACGGATGACCTGGAAGGAGATGTTTCTACAACCTGGCACAGTAACGATGACGATGTGTACAGGGCGCC
TCCAATTGACCGTTCCATCCTTCCCACTGCTCCACGGGCTGCTCGGGAGAGACACCCAAGCTGGCAAAGTGAAGA
AACTCAGGAACGGGAACGGTCGAGGACAGGAAGTGAGTCATCAGAGACTGGGACCTCCACCACATCTGGCAGAAA
TGCATGAAGGAGAGAGAGTGAGAAGTCTCTAGAAAATGAAACACTCAATAAGGAGGAAGATTGCCACTCTCCAAC
TTCTAAACCTCCCAAACCTGATCAGCCCCCTAAAGGTAATGCCAGCCCCCTCCACCAAAGGAGAATGCTTGGGTGAA
GCGAAGTTCTAACCTCCTGCTCGATCTCAGAGCTCAGACACAGAGCAGCAATCCCCCTACAAGTGGTGGGGGAAA
AGTAGCTCCAGCTCAACCATCTGAGGAAGGACCAGGAAGGAAAGATGAAAAATAAGTAGATGGGATGAATGTCCC
AAAAGGCCAAACTGGGAACCTTAGCCGTGGTCCAGGAGACTGAGGGAAACAGAGACCCTGGAAGGAGTCAGATAG
GAAAGATGGCAAAGGATCAAGACTCCAGATCTGCACCTGAGCCAAAGAAACCTGAGGAAAAATCCAGCTTCCAA
GTTTCAGTTCTGCAAGCAAGTATGCTGCTCTCTCTGTTGATGGTGAAGATGAAAAATGAGGGAGAAGATTATGCCAA
ATAGACCTCTACATCCTGTGCTTTTCTCCTAGTTTCTCTCCACCCTGGAACATTTCGAGAGCAAAATCAAAACCTCT
ATCCAGACAAGACAAAAATAAACTCACCATCTCCTGAAGACCTTTCTTACCTTTTTTTTTTAAAAACAAAAATGAAA
TTATTTTGATGCTGCTGCAGCCTTTAAAGTATTGAAGTAACTGGAGAATTGCCAATACAGCCAGAGAGAAAGGG
ACTACAGCTTTTTAGAGAAGTTGTGGTGCCTTATGTCACCATGCAGTTGCCAGTGTGATTAGTGCCTAGGGGTCT
CCATTTAGCAGAAATGGTAATGACAGTGATATAACGCCCTGGAACCTGGTTGGGCAGTAGGGGAGGGAGGTAGAAG
GAAAAGTGTGAGATTTCTACCTTTTAGTTTTTCTTATTGTGGCATATATGAATTCTCAAACATTATCTGAATA
AATTTTCCATTCTTGGAAGGTAGATTTAGCCTCAAGTTGTTTTAGTCTCCAGGAGGCTGCCAGCCCCCTCCTCTT
ATTTAATCTGAGTTTTGGGGGACAGCCTAGAGGGAAATCCTTTTTTTTTTTTTTTTACCCCCAAGGGGGTTAG
TTGGGAGTGAGACTATAGGCCATAAAGAATGGGACTCATTGGACCAAAAAATAATGGGAAAAATCGTGGTTTGAAAG
GAAGCTTTTGGAATTGATGAGTCATTTTGACCAGGTAATAGGGGAAAAATGTGTGACCTCCAGCAAACACATG
AATGGTTATTTCTGGAGCCGGAAGCACTTGGGGGTGCTGGTAATCCCAATGTTTTCTGTGTCTTAGTTTTACC
CTTCTAAACACTGTCTTTTGAAGTTTGAATATATCCACATTCTATTGAAACCTTGAACTAAAAATTTAGA
CTCTTATCGTCATCTTAAGTTCTTCATGCTACTCTTAACCTCCAAAAAGCAGTATCTAAGTCACATACATGATG
TCTTGGGCATTTTCTCTCTCAGCCATGGAGAACTCTGAAAGGAAGAATCGCTGCTTTTCTCAAGCAAATCGGTTT
CTTGATATCTTCTGGTTCTCACTCCTTGCTGCTCCTGATGCTTTGACCCCTTTTATTGATCAGAGTGCTCTAGA
ATAATGGATGGTCTTGGATGGTGGATAAATAGGGACAGGGACAGTTAAATTGGGAGCCTTTCTTACAACCTTGAT
GGGTTTTTTTCCCCCAAGTTTCCTTCTCCACTGAAATGCCACACTAATGTTTGTTGGATTCTAGAGGTGGCCAG
ACCAATGTGTTTTGTTTTGTTTTTTTTTTTTTAAGCTTCCCTTGAGAGAATAAACGGAAATGGAGAGAATAATTT
AACAAGGTCTGTTTCTCTTGCAACACAGTAGCTAAACTTGCTGCTGCTTTATATGCATTTTGTAGGGATCAGC
TTGGTAGACAGTATTAGCAGAGAAACACCTTGATCTTGGTTTGCAAACCTTCTGCCATCAGTCCTAGATTAGGC
CCTGTTAGCCATGCAGGGGTGTTGGTTTATGCGTGCTGCAGCAGTGGGCATAATGAATATAATTTACCCAGTGG
ACAAAGGTGTGTACCAAGTGAATTTAAATAATTGGTGTGGATTGGCCAGTAGCTAAGAAGTGGGCTTTTAAAGAG
TATTGAAGATTGAAAGGTGTTTTTTTCTTTTTTAAAAAAGAAAAAAACTATTGATTGTAGATAATGAAAAGC
TAGGGTTTGCCCTCTTCATGTCTACTCTCCTTCCAAATAGTTATATCCAAACTGTTTTTCCCTGTCCCTACCT
TGTCCCCCCCATTAAAAATAGAAACAGGGATTGATTAATGTCCCGCTCCTGAATACATGTAAAAATTTGTACAAAA
TATCTTCTATGAAAATGATTTGTAATCTGTAGACTTATTACCTGGGAGATGTCTTGATGTAAAATCCCATCCTTT
GGGTTGTGGGTTTTTTGTTTTCTCCAAATAAATCTGATCTTTAAAGTTC

WO 2004/030615

PCT/US2003/028547

2590/6881
FIGURE 2382

MAASAKKKKKGKTISLTDFLAEDGGTGGGSTYVSKPVSWADETDDLEGDVSTTWHSNDDDDVYRAPPIDRSILPT
APRAAREPNIDRSRLPKSPPYTAF LGNL PYDVTEESIKEFFRGLNISAVRLPREPSNPERLKGFYAEFEDLDSL
LSALSLNEESLGNRRIRVDVADQAQDKDRDDRSFGRDRNRDSDKTDTDWRARPATDSFDDYPPRRGDDSFGDSYD
SRIGSGRRAFSGYRDDDYRGGGDRYEDRYDRDDRSWSSRDDYSRDDYRDDRGPQRPKLNLKPRSTPKEDD
SSASTSQSTRAASIFGGAKPVDTAAREREVEERLQKEQEKLQRQLDEPKLERRPRERHPSWRSEETQERERSRTG
SESSQTGTSTTSSRNARRRESEKSLENETLNKEEDCHSPTSKPPKPDQPLKVMPPPPKENAWVKRSSNPPARSQ
SSDTEQQSPTSGGKVAQAQPSSEGFGRKDENKVDGMNAPKGQTGNSSRGP GDGGNRDHWKESDRKDGKKDQDSR
SAPEPKKPEENPASKFSSASKYAALSVDGEDENEGEDYAE

WO 2004/030615

PCT/US2003/028547

2591/6881
FIGURE 2383

GTAGCGGGAGCGGAGAGCGGACCCCGGAGAGCGGACCCAGAGAACCCTGAGCAGCCCCGCCGCTGCCGGCCTAG
TTACCGTCATACCACGGGAGGAGCCGCAGCTGECGCAGCCGGCCCCAGTCTCCATCACCGCAACCAATGAGCAGC
AAGGCCGAGACCCAGCAGCCACCCGCCGCCCGCCCTTCCCCCACCAGCCCCCTCCCGTCCCCCGGCCGCCCC
CGCCCTCAGCGCCGCCGACACCAAGCCCAGGCACTACGGGCAGCTGCGCAGGGAGCGGTGGTCCGGGCGGCCCTCAC
ATCGGCGGCCCTGCCAGCGTGGACAAGAAGGTCATCGCAGTGAAGGTTTGGGAACAGTAAAATGGTTCAATGT
AAGGAACGGATATGGTTTCATCAACAGGAATGACACCAAGGAAGATGTATTTGTACACCAGACTGCCATAAAGAA
TAACCCAGGAAGTACCTTCGCAGTGTAGGAGATGAAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAGAGGG
TGCGGAGGCAGCAAATGTTACAGATCCTGGTGGTGTTCGAGTTCAAGGCGGTAAATATGCAGCAGATCGTAACCA
TTATAGACGCTATCCACGTCATAGGGGTCTCCACGCAATTACCAGCAAAATTACCAGAACAGTGAGAGTGGGGA
AAAGACCGAGGGATCGGAGAATGCTCCCGAAGGCCAGGCCCAACAATGCCGGCCCTACCGCAGGCAAAGGTTCCC
ACCTTACTACATGCGGAGACCCCTATGGGTGTCGACCACAGTATTCCAGCCCTCCTGTGCAGGGAGAAAGTGATGGA
GGGTGCTGACAACCAGGGTGCAGGAGAACAAGGTAGACCAGTGAGGCAGAATATGTATCGGGGATATAGACCACG
ATTCCGCAGGGGCCCTCCTTGCCAAAGACAGCCTAGAGAGTACGGCAATGAAGAAGATAAAATCAAGGAGATGAG
ACCCAGGGTCAGCAGCCACCTCAACGTCGGTACCGCAGCAACTTCAATTACCAACGCAGATGCCAGAAAACCTT
AAATCACAAGATGGCAAAGAGACAAAATCAGCCAATCCACCAGCTGAGAAATTCGTCTGCTCCCGAGGCTGAGCAG
GGCGGGGCTGAGTAAATGCCGGCTTACCATCTCTACCATCATCCGGTTTAGTCATCCAACAAGAAGAAATATGAA
ATTCCAGCAATGAAGAAATGAACAAAAGATTGGAGCTGAAGACCTTAAGTGCTTGCTTTTTGCCCGTTGACCAGAT
AAATAGAACTATCTGCATTATCTATGCAGCATGGGGTTTTTATTATTTTACCTAAATATGTCTCTTTTTGGTAA
TAACAAACGTGTTTTTTTTTAAAAAGCCTTGTTTTTCTCAATACGCCTTTAAAGG

WO 2004/030615

PCT/US2003/028547

2592/6881
FIGURE 2384

MRRPYGCRPQYSSPPVQGEVMEGADNQGAGEQGRFVRQNMRYRGYRPRFRRGPPCQRQPREYGNEDKIKEMRPV
SSHLNVGTAATSI TNADAQKTLNHKMAKRQNP IHQLRIRLLPRLSRAGLSKCRLTISTII RF SHP TRRNMKFQQ

WO 2004/030615

PCT/US2003/028547

2593/6881
FIGURE 2385A

GGGACCTGGAAGCGCCCCAGCCCCGAGCGATCGCAGATTGCGCTTTCAAACAAAAGAGGCGCCCCGGGGGGTGG
GACCGGGACCTCACCCGGTCTCGCAGAGTTGCGGCCGCCCGCCCCCTTCAGCCCCGGCTCTCCGTATGCGCATGA
GCAGAGGCGCCTCCCTCTGTTCTCCCAAGGCTAAACTTTCTAATTCCTTCTTTGGGCTCGGGGGCTCCCGGAG
CAGGGCGAGAGCTCGCGTCGCCGGAAGGAAGACGGGAAGAAAGGGCAGGCGGCTCGGCGGGCGTCTTCTCCACT
CCTCTGCCGCGTCCCCGTGGCTGCAGGGAGCCGGCATGGGGCTTCTCCAGTTGCTAGCTTTCAGTTTCTTAGCCC
TGTGCAGAGCCCCGAGTGCAGCGCTCAGGAACCCGAGTTCAGCTACGGCTGCGCAGAAGGCAGCTGCTATCCCCGCA
CGGGCGACCTTCTCATCGGCCGAGCACAGAAAGCTTTCGGTGACCTCGACGTGCGGGCTGCACAAGCCCCGAACCC
TACTGTATCGTCAGCCACTTGCAGGAGGACAAAAATGCTTCATATGCAATTTCCCAAGATCCTTATCATGAGACC
CTGAATCCTGACAGCCATCTCATTGAAAATGTGGTCACTACATTTGCTCCAAACCGCCTTAAGATTTGGTGGCAA
TCTGAAAATGGTGTGGAATGTAATATCCAAGTGGATTTGGAAGCAGAAATCCATTTTACTCATCTCATAATG
ACTTTCAAGACATTCCGTCCAGCTGCTATGCTGATAGAACGATCGTCCGACTTTGGGAAAACCTGGGGTGTGTAT
AGATACTTCGCCTATGACTGTGAGGCCTCGTTTCCAGGCATTTCAACTGGCCCCATGAAAAAGTCGATGACATA
ATTTGTGATTCTCGATATTCTGACATTGAACCTCAACTGAAGGAGAGGTGATATTCGTGCTTTAGATCCTGCT
TTCAAATAGAAGATCCTTATAGCCCAAGGATACAGAATTTATTAATAATTACCAACTTGAGAATCAAGTTTGTG
AAACTGCATACTTTGGGAGATAACCTTCTGGATTCCAGGATGGAAATCAGAGAAAAGTATTATTATGCAGTTTAT
GATATGGTGGTTCGAGGAAATGCTTCTGCTATGGTCATGCCAGCGAATGTGCCCTGTGGATGGATTCAATGAA
GAAGTGAAGGAATGGTTCACGGACACTGCATGTGCAGGCATAACACCAAGGGCTTAACTGTGAACCTCTGCATG
GATTTCTACCATGATTTACCTTGGAGACCTGCTGAAGGCCGAAACAGCAACGCCTGTAAAAATGTAACCTGCAAT
GAACATTCCATCTCTTGTCACTTTGACATGGCTGTTTACCTGGCCACGGGGAACGTCAGCGGAGGCGTGTGTGAT
GACTGTGTCAGCACAAACCATGGGGCGCAACTGTGAGCAGTGCAAGCCGTTTACTACCAGCACCCAGAGAGGGAC
ATCCGAGATCCTAATTTCTGTGAACGTATGTACGTGTGACCCAGCTGGCTCTCAAAATGAGGGAATTTGTGACAG
CTATACTGATTTTCTACTGGTCTCATTGCTGGCCAGTGTGCGTGTAAATTAATGTGGAAGGAGAACATTGTGA
TGTTTGCAGAAAGAGGCTTCTATGATTTAAGCAGTGAAGATCCATTTGGTTGTAAATCTTGTGCTTGCAATCCTCT
GGGAACAATTCCTGGAGGGAATCCTTGTGATTCCGAGACAGGTCACTGCTACTGCAAGCGTCTGGTGACAGGACA
GCATTGTGACCAGTGCCCTGCCAGAGCACTGGGGCTTAAGCAATGATTTGGATGGATGTGACCATGTGACTTGGACG
CTAGTGCAACGAAGTGAACCTGGTTACTACTTTGCCACCCTGGATCACTACCTCTATGAAGCGGAGGAAGCCAA
CTTGGGGCTTGGGGTTAGCATAGTGAGCGGCAATATATCCAGGACCGGATTCCCTCTCTGGACTGGAGCCGGCTT
CGTCCGAGTGCCCTGAAGGGCTTATTTGGAGTTTTCATTGACAACATACCATATTCATGGAGTACGACATCCT
AATTCGCTACGAGCCACAGCTACCCGACCCTGGGAAAAAGCTGTATCACAGTGCAGCGACCTGGAAGGATTCC
AACCAGCAGCCGATGTGGTAATACCATCCCCGATGATGACAACAGGTGGTGTCAATTATCACCAGGCTCAAGATA
TGTCGTCCTTCTCGGCCGCTGTGCTTTGAGAAGGGAACAACTACACGGTGAGGTGGAGCTGCCTCAGTACAC
CTCCTCTGATAGCGAGCTGGAGAGCCCTACACGCTGATCGATTCTTGTGTTCTCATGCCATACTGTAAATCACT
GGACATCTTCACCGTGGGAGGTTTCAAGGATGGGGTGGTCAACACAGTGCCTGGGAAAACCTTTTCAAGATACCG
ATGTCTAGAGAACAGCAGAGAAGCGTTGTGAAAAACCCGATGACAGATGTTTGCAGAAACATCATCTTTAGCATTTT
TGCCCTGTTACACCAGACAGGCTGGCTTGTGAATGCGACCCCTCAGGGTTTCGTTAAGTTCCGTGTGTGATCCCAA
CGGAGGCCAGTGCCAGTGCCGGCCCCAACGTGGTTGGAAGAACCTGCAACAGATGTGCACCTGGAACCTTTTGGCTT
TGGCCCCAGTGGAATGCAAACTTGTGAGTGCCATCTGCAAGGATCTGTCAATGCCTTCTGCAATCCCGTCACTGG
CCAGTGCCACTGTTTCCAGGGAGTGATGCTCGGCAGTGTGATCGGTGCTTACCTGGGCACTGGGGCTTTCCAAG
TTGCCAGCCCTGCCAGTGCAATGGCCACGCCGATGACTGCGACCCAGTACTGGGAGTGTGTAAGTGGCAGGA
CTACACCATGGGTCTAACTGTGAAAGGTGCTTGGCTGGTTACTATGGCGACCCCATCATTTGGGTGAGGATCA
CTGCCGCCCTTGGCCCTTGGCCAGATGGTCCCAGAGTGGACGCCAGTTTGGCAGGAGCTGTACCAAGATCCTGT
TACTTTACAGCTTGCCTGTGTTTGTGATCCTGGATACATTGGTTCCAGATGTGACGACTGTGCCTCAGGATACTT
TGGCAATCCATCAGAAAGTTGGGGGGTGTGTGACGCTTGGCAGTGTGACAAACATTGACACGACAGACCCAGA
AGCCTGTGACAAGGAGACTGGGAGGTGTCTCAAGTGCCTGTACCACACGGAAGGGGAACACTGTGAGTTCTGCCG
GTTTGGATACTATGGTGATGCCCTCCAGCAGGACTGTGCAAGTGTGTCTGTAATTACCTGGGCACCGTGAAGA
GCACTGTAAACGGCTCTGACTGCCAGTGCAGACAAAGCCACTGGTCAGTGCTTGTGTCTTCTAATGTGATCGGGCA
GAACTGTGACCGCTGTGCGCCCAATACCTGGCAGCTGGCCAGTGGCAC TGGCTGTGACCCATGCAACTGCAATGC

WO 2004/030615

PCT/US2003/028547

2594/6881
FIGURE 2385B

TGCTCATTCCCTTCGGGCCATCTTGCAATGAGTTCACGGGGCAGTGCCAGTG CATGCCTGGGTTTGGAGGCCGCAC
CTGCAGCGAGTGCCAGGAACCTTCTGGGGAGACCCGACGTGGAGTGCCGAGCCTGTGACTGTGACCCAGGGG
CATTGAGACGCCACAGTGTGACCAGTCCACGGGCCAGTGTGTCTGCGTTGAGGGTGTGAGGGTCCACGCTGTGA
CAAGTGCACGCGAGGGTACTCGGGGTCTTCCCTGACTGCACACCCTGCCACCAGTGCTTTGCTCTCTGGGATGT
GATCATTGCCGAGCTGACCAACAGGACACACAGATTCCCTGGAGAAAGCCAAGGCCTTGAAGATCAGTGGTGTGAT
CGGGCCTTACCGTGAGACTGTGGACTCGGTGGAGAGGAAAGTCAGCGAGATAAAAGACATCCTGGCGCAGAGCCC
CGCAGCAGAGCCACTGAAAAACATTGGGAATCTCTTTGAGGAAGCAGAGAAACTGATTAAAGATGTTACAGAAAT
GATGGCTCAAGTAGAAGTGAAATTATCTGACACAACCTTCCCAAAGCAACAGCACAGCCAAAGAAGCTGGATTCTCT
ACAGACAGAAGCCGAAAGCCTAGACAACACTGTGAAAGAAGCTTGTGTAACAAGCTGGAATTTATCAAAAAGCTCAGA
TATTCGGGGTGCCCTTGATAGCATTACCAAGTATTTCCAGATGTCTCTTGAGGCAGAGGAGAGGGTGAATGCCTC
CACCACAGAACCCAACAGCACTGTGGAGCAGTCAGCCCTCATGAGAGACAGAGTAGAAGACGTGATGATGGAGCG
AGAAATCCAGTTCAAGGAAAAACAAGAGGAGCAGGCTCGCCTCCTTGATGAAGCTGGCAGGCAAGCTACAAAGCCT
AGACCTTTTCAGCCGCTGCCGAAATGACCTGTGGAACACCCCCAGGGGCCTCCTGTTCCGAGACTGAATGTGGCGG
GCCAAACTGCAGAACTGACGAAGGAGAGAGGAAGTGTGGGGGGCCTGGCTGTGGTGGTCTGGTTACTGTTGCACA
CAACGCCCTGGCAGAAAGCCATGGACTTGGAACCAAGATGTCTTGAGTGCCCTGGCTGAAGTGGAACAGCTCTCCAA
GATGGTCTCTGAAGCAAACTGAGGGCAGATGAGGCCAAAAACAAGTGCTGAAGACATTCTGTTGAAGACAAATGC
TACCAAAGAAAAATGGACAAGAGCAATGAGGAGCTGAGAAATCTAATCAAGCAAAATCAGAAACTTTTTGACCCA
GGATAGTGCTGATTTGGACAGCATTGAAGCAGTTGCTAATGAAGTATTGAAAATGGAGATGCCTAGCACCCACA
GCAGTTACAGAAGCTTGACAGAAGATATACGTGAACGAGTTGAAAGCCTTTCTCAAGTAGAGGTTATTCTTCAGCA
TAGTGCTGCTGACATTGCCAGAGCTGAGATGTTGTTAGAAGAAGCTAAAAGAGCAAGCAAAAGTGCAACAGATGT
TAAAGTCACTGCAGATATGGTAAAGGAAGCTCTGGAAGAAGCAGAAAAGGCCAGGTGCGCAGCAGAGAAGGCAAT
TAAACAAGCAGATGAAGACATTCAAGGAACCCAGAACCTGTAACTTCGATTGAGTCTGAAACAGCAGCTTCTGA
GGAAACCTTGTTCACGCGTCCCAGCGCATCAGCGAGTTAGAGAGGAATGTGGAAGAAGCTTAAGCGGAAAGCTGC
CCAAAAGCTCCGGGGAGGCAGAAATATATGAAAAAGTAGTATATACTGTGAAGCAAAAGTGCAAGATGTTAAGAA
GACTTTAGATGGTGAAGCTTGATGAAAAAGTATAAAAAGTAGAAAAATTAATTGCCAAAAAACTGAAGAGTCAGC
TGATGCCAGAAGGAAAGCCGAAATGCTACAAAATGAAGCAAAAAGCTCTTTTAGCTCAAGCAAAATAGCAAGCTGCA
ACTGCTCAAAGATTTAGAAAGAAAAATGAAGACAATCAAAGATACTTAGAAGATAAAGCTCAAGAATTAGCAAG
ACTGGAAGGAGAAAGTCCGTTCACTCCTAAAGGATATAAGCCAGAAAGTTGCTGTGTATAGCACATGCTTGTAACA
GAGGAGAATAAAAAATGGCTGAGGTGAACAAGGTAAAAACAATACATTTTAAAAAGTACTTAATGCTCTTCAA
ATAAAACATCACCTATTTAATGTTTTAATCACATTTTGTATGGAGTTAAATAAAG

WO 2004/030615

PCT/US2003/028547

2595/6881
FIGURE 2386

CTCTTTTTCCGGCTGGAACCATGGTGGGTGTAGAAGAGAAGAAGAAGGTTCTGCTGTGCCAGAAACCCTTAAGA
AAAAGCGAAGGAATTTCTCAGAGCTGAAGATGAAGCGCCTGAGAAAGAAGTTTGCCCAAAGATGCTTCGAAAGG
CAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAGGGAATATAGGCAGATGTACAGAACTGAAATTC
GAATGGCGAGGATGGCAAGAAAAGCTGGCAACTACTTTGTACCTGCAGAACCCAAACTGGCATTGTGCATCAGAA
TCAGAGGTATCAGTGGCGTGAGCCCAAAGGTCCGAAAGGTGTTGCAGCTTCTTCGCCTTCGTCAAATCTACAATG
GAACCTTTGTGAAGCTCAACAAGGCTTCGACTAACATGCTGAGGATTGTAGAGCCATATATTGCATGGGGGTACC
CCAATCTGAAGTCAGTAAATGAACTAATCTACAAGAGTGGTTATGGCAAAATCAATAAGAAGCGAATTGCTTTGA
CAGATAACGCTTTGATTGCTCGATCTCTTGGTAAATATGGCATCATCTGCATGGAGGATCTGATTCATGAGATCT
ATACTGTTGGAAAACGCTTCAAAGAGGCAAATAACTTCCTGTGGCCCTTCAAATTGTCTTCTCCACGAGGTGGAA
TGAAGAAAAAGACCACCCATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGAGGACCAGATCAACAGGCTTATTA
GAAGAATGAACTAAGGTGTCTACCATGACTATTTCTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTCAAAAT
TGG

WO 2004/030615

PCT/US2003/028547

2596/6881
FIGURE 2387

CTTCCTAGAAGGTAATGTACGAACTCGTCTCCAAAGGATACTTAGGTTGCACCAGTGTATTTGTAAACAGGAGC ,
AAATTTGGACCTTGCCGGGCCAAAGTCGTGTACGTGGAACCTCTTAATCTCAGCATCCGGAGCTCCAGGAAGGG
AAAATTTCAAGTCAGATAGAATTCTATATATACCATTTCTAGGAACCTTCAGCCCTCAAGATTCCAACATCATGA
CCTCAGTTTCAACACAGTTGTCCTTAGTCCTCATGTCACTGCTTTTGGTGCTGCCTGTTGTGGAAGCAGTAGAAG
CCGGTGATGCAATCGCCCTTTTGGTTAGGIGTGTTCTCAGCATTACAGGCATTTGTGCCTGCTTGGGGGTATATG
CACGAAAAAGAAATGGACAGATGTGACTTTGAAAGGCCTACTGAGTCAAACCTCACCCCTGAAAACCTTTGCGCTT
TAGAGGCTAAACCTGAGATTTGGTGTGTGAAAGGTTCCAAGAATCAGTAAATAAGGGAGTTTCACATTTTTCATT
GTTTCCATGAAATGGCAACAAACATACATTTATAAATTGAAAAAAAAATGTTTTCTTTACAACAAATAATGCACA
GAAAAATGCAGCCTATAATTTGCTAGTTAGGTAGTCAAAGAAGTAAGATGGCTGAAATTTACATAAGTAAATTTT
CATAATCTTAGAATTCTCTCAAAGCATGTGAAATAGGAAGAAGGAAGTTCTTGCCCAGAATCTTAGGAAATCACC
ACTGTTTCGGTTATAATCACTGCCTCCTGAATCGTTGAGGAGTCTTTTAAATTAGATTTTGTGTTGTGCTCCC
AAGTTAATATTATATTTAGATATCAGAGAGTCAGGCAAAAAGGAAAACCTTTATCTCTAGGGAAAAACATTTAG
AAAAATGTATTCAGTGTATCTAATACTGAAATGCGGAAAAAAATTTAATGTTAAAAAAAACATATAGACATTGAC
ATGGAAGAGATTTAATGTTTTGAAAAAAACCTTTATATTAAGTAACTGAGTAACATCCTCCTGATGAGAAGTACTAT
ATTAAATATAAACCCATTATGTTAT

WO 2004/030615

PCT/US2003/028547

2597/6881
FIGURE 2388

MYELVSKGYLGCTSVFVKQEIQWTLPQSRVTWNLLISASGAPGRENFKSDRILYIPFLGTFSPQDSNIMTSVST
QLSLVLSLLLVLFPVVEAVEAGDAIALLLGVVLSITGICACLG VYARKRNGQM

WO 2004/030615

PCT/US2003/028547

2598/6881
FIGURE 2389

GAGTGGCTGTTGAGCGGCGCCGCGGGAGTTCCGCAGGTTTCCCGTGTTCGCAGCGGAGCCGGAGGCCAGCTGAAC
CCGGCCGTGGGATCCCGGATAGGAGGAGGAGGGGACCCATAGGACGCGTTAACATGGACCTGGAAAAACAAAGTGA
AGAAGATGGGCTTAGGTCACGAGCAAGGATTTGGAGCCCCTTGTTTAAAATGCAAAGAAAAATGTGAAGGATTTCG
AACTGCACCTTCTGGAGAAAAATATGTCGTAAGTGTGGCCAAGAAGAGCATGATGTCCTCTTGAGCAATG
AAGAGGATCGAAAAGTGGGAAAACTTTTTGAAGACACCAAGTATACCACTCTGATTGCAAACTAAAGTCAGATG
GAATTCCCATGTATAAACGCAATGTTATGATATTGACGAATCCAGTTGCTGCCAAGAAGAATGTCTCCATCAATA
CAGTTACCTATGAGTGGGCTCCTCCTGTCCAGAATCAAGCATTGGCCAGGCAGTACATGCAGATGCTACCCAAGG
AAAAGCAGCCAGTAGCAGGCTCAGAGGGGGCACAGTACCGGAAGAAGCAGCTGGCAAAGCAGCTCCCTGCACATG
ACCAGGACCCCTTCAAAGTGCCATGAGTTGTCTCCCAGAGAGGTGAAGGAGATGGAGCAGTTTGTGAAGAAATATA
AGAGCGAAGCTCTGGGAGTAGGAGATGTCAAACCTCCCTGTGAGATGGATGCCCAAGGCCCCAAACAAATGAACA
TTCCTGGAGGGGATAGAAGCACCCAGCAGCAGTGGGGGCCATGGAGGACAAATCTGCTGAGCACAAAAGAACTC
AATATTCCTGCTATTGCTGCAAACTGAGTATGAAAGAAGGTGACCCAGCCATCTATGCCGAAAGGGCTGGCTATG
ATAAACTGTGGCACCCAGCTTGTTTTGTCTGCAGCACCTGCCATGAACTCCTGGTTGACATGATTTATTTTTGGA
AGAATGAGAAGCTATACTGTGGCAGACATTACTGTGACAGCGAGAAACCCCGATGTGCTGGCTGTGACGAGCTGA
TATTCAGCAATGAGTATACCCAGGCAGAAAACAGAAATTGGCACCTGAAACACTTCTGCTGCTTTGACTGTGATA
GCATTCTAGCTGGGGAGATATACGTGATGGTCAATGACAAGCCCGTGTGCAAGCCCTGCTATGTGAAGAATCACG
CTGTGGTGTGTCAAGGATGCCACAATGCCATCGACCCAGAAGTGCAGCGGGTGACCTATAACAATTCAGCTGGC
ATGCATCCACAGAGTGCTTTCTGTGCTCTTGCTGCAGCAAATGCCTCATTGGGCAGAAGTTCATGCCAGTAGAAG
GGATGGTTTTCTGTTCAAGTGAATGTAAGAAGAGGATGTCTTAGGAGGAGGGCACCCAGAAGTATCGAGCCATAG
CTATCCAAAGTGGTCTGCATTTCTACTGTAAAATGCAATTTGAAAAAATAAAACGCAAAAAAAGAACTGTAAA
GGAAACCAAGAGATTTTGTTTAATTTTTTTGGCCATTTTTTCTTCATCAATTTTTTTTGGTCTCAACTTTTAAA
CTTGGTTTAAAGCATTTGATTTGTAAAACAGTAAATAATTGTATCTTTCCATAGCTTTTCAAATGTGAAATCATT
TTGGAAGCTTGGATCTCATTAAACTTCATGTCTCTATTCCATTTGTGCCACACACTTAAAAGTTAGTGTACTGAA
TGGAAAGATGAGCATTCTAGTTCTACACTTCTTTTTTCCCCCTCATGTGTAAAATGAAAAGAAAATAAATTTG
CCCTAATACCAAGGCGCTACGTTTATTGCCTCGTCTTATTCACTGACCTTTGTAATGATACACAGTGAATTCCTT
TTGACAAAGAGAAATGCAGTGTAGTATGCAGAGCTGCTGTTTTAATGCCTATGCATTTACTCTTTCCTGATTTAG
GCAGAGGTGGCATTCTTTATTGCAATTTCTCTATTTTTTAAATGTACCCTACCTTCAGTATTCTCTTTGTAAGT
TGGTGACTTGCACTGTGGCCTTGAATATTTTATTATCACATGTGGCATAACAGTATCCACACTTTTTAGTTCTT
TATTTTTTTTTTTTTTATTTTGAAGCAATTCCTGCCTCAGCCTCCCAAATAGCTGGGATTACAGGTGCATGCCAC
CACACCCAGCTAATTTTTGTATTTTGTAGAGACAGGTTTTACCATGTTAGCCAGGCTGGTCTCAAACCTCTG
ACCTCAGATGATCCGCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGTGTGGGAGCCACCATGCCTGACCCA
CACACTTTTTACTTGTATAGATGATTTTGGCTTGGACATAAAAGCCAAGCCACCATTTGCTTTTAAATCCAAAG
AACATGTATAGTTTTTGTACCCAGAGACTATGATTTATATTGATTGCACCTGCCTGCCATGATTTAGATAAGATT
TTTTTGCATGGTTTTTATTCTTTCCTAATGGATCCTGTTTTATAATACTTCCAAGCCTGTCCATGGATATATCA
AATGTCTTCACTTGTATATTTTATGGCTAGGTATTTCTAATGTTTATTCTTCCCTGTGTACTTCTACACATAGC
TATGCACTATGAAAATTAAATGGAATGAATGATATGATATTACTCAAATAAAGTTTCTTTCACTTT

WO 2004/030615

PCT/US2003/028547

2599/6881

FIGURE 2390

MDLENKVKKMGLGHEQGFGAPCLKCKEKCEGFELHFWRKICRNCKCGQEEHDVLLSNEEDRKVGKLFEDTKYTTL
IAKLKSDGIPMYKRNVMILTNPVAAKKNVSINTVTYEWAPPVQNQALARQYMQMLPKEKQPVAGSEGAQYRKKQL
AKQLPAHDQDPSKCHELSPREVKEMEQFVKKYKSEALGVGDVKLPCEMDAQGPKQMNIPGGDRSTPAAVGAMEDK
SAEHKRTQYSCYCKLSMKEGDPAIYAERAGYDKLWHPACFVCSTCHELLVDMIFYWKNEKLYCGRHYCDSEKPR
CAGCDELIFSNEYTQAENQNWHLKHFFCCFDCDSILAGEIYVMVNDKPVCKPCYVKNHAVVCQGCHNAIDPEVQRV
TYNNFSWHASTECFLCSCCSKCLIGQKFMPEGMVFCVSVECKKRMS

WO 2004/030615

PCT/US2003/028547

2600/6881
FIGURE 2391

GGGAGAAACGTTCTCACTCGCTCTCTGCTCGCTGCGGGCGCTCCCCGCCCTCTGCTGCCAGAACCTTGGGGATGT
GCCTAGACCCGGCGCAGCACACGTCCGGGCCAACCGCGAGCAGAACAAACCTTTGGCGGGCGGCCAGGAGGCTCC
CTCCCAGCCACCGCCCCCTCCAGCGCCTTTTTTTCCCCCATAACAATACAAGATCTTCCTTCCTCAGTTCCCTT
AAAGCACAGCCCAGGGAAACCTCCTCACAGTTTTTCATCCAGCCACGGGCCAGCATGTCTGGGGGCAAATACGTAG
ACTCGAGGGACATCTCTACACCGTTCCCATCCGGGAACAGGGCAACATCTACAAGCCCAACAACAAGGCCATGG
CAGACGAGCTGAGCGAGAAGCAAGTGACGACGCGCACACCAAGGAGATCGACCTGGTCAACCGCGACCCCTAAAC
ACCTCAACGATGACGTGGTCAAGATTGACTTTGAAGATGTGATTGCAGAACCAGAAGGGACACACAGTTTTGAAG
GCATTTGGAAGGCCAGCTTCACCACCTTCACTGTGACGAAATACTGGTTTTACCGCTTGCTGTCTGCCCTCTTTG
GCATCCCGATGGCACTCATCTGGGGCATTACTTCGCCATTCTCTCTTTTCTGCACATCTGGGCAGTTGTACCAT
GCATTAAGAGCTTCCTGATTGAGATTCACTGCATCAGCCGTGTCTATTCCATCTACGTCCACACCGCTCTGTGACC
CACTCTTTGAAGCTGTTGGGAAAATATTAGCAATGTCCGCATCAACTTGCAGAAAGAAATATTAATGACATTTT
AAGGATAGAAGTATACCTGATTTTTTTTCTTTTAAATTTTCTGGTGCCAATTTCAAGTTCCAAGTTGCTAATAC
AGCAACAATTTATGAATTGAATTATCTTGGTTGAAAATAAAAAGATCACTTTCTCAGTTTTTCATAAGTATTATGT
CTCTTCTGAGCTATTTTCATCTATTTTTTGGCAGTCTGAATTTTTTAAACCCATTTAAATTTTTTCTTACCTTTT
TATTTGCATGTGGATCAACCATCGCTTTATTGGCTGAGATATGAACATATTGTTGAAAGGTAATTTGAGAGAAAT
ATGAAGAACTGAGGAGGAAAAAAAAAAAAAAAAAGAAAAGAACCAACAACCTCAACTGCCTACTCCAAAATGTTGGTC
ATTTTATGTTAAGGGAAGAATTCCAGGGTATGGCCATGGAGTGTAAGTATGTGGGCAGATTTTCAGCAAACCTC
TTTTCCCACTGTTAAGGAGTTAGTGGATTACTGCCATTCACTTCATAATCCAGTAGGATCCAGTGATCCTTACA
AGTTAGAAAACATAATCTTCTGCCTTCTCATGATCCAACATAATGCCTTACTCTTCTTGAAATTTTAAACCTATGAT
ATTTCTGTGCCTGAATATTTGTTATGTAGATAACAAGACCTCAGTGCCTTCTGTGTTTTTACATTTTCTTTTCT
AAATAGGGTCTAACTCAGCAAACCTCGCTTTAGGTCAGCAGCCTCCCTGAAGACCAAAATTAGAATATCCATGACCT
AGTTTTCCATGCGTGTTTCTGACTCTGAGCTACAGAGTCTGGTGAAGCTCACTTCTGGGCTTCATCTGGCAACAT
CTTTATCCGTAGTGGGTATGGTTGACACTAGCCCAATGAAATGAATTAAAGTGGACCAATAGGGCTGAGCTCTCT
GTGGGCTGGCAGTCCTGGAAGCCAGCTTTCCCTGCCTCTCATCAACTGAATGAGGTCAGCATGTCTATTAGCTT
CGTTTATTTTCAAGAATAATCACGCTTTCTGAATCCAACTAATCCATCACCGGGGTGGTTTAGTGGCTCAACA
TTGTGTTCCCATTTTCAAGCTGATCAGTGGGCCCTCCAAGGAGGGGCTGTAAATGGAGGCCATTGTGTGAGCCTATC
AGAGTTGCTGCAAACCTGACCCCTGCTCAGTAAAGCACTTGCAACCGTCTGTTATGCTGTGACACATGGCCCTC
CCCCTGCCAGGAGCTTTGGACCTAATCCAAGCATCCCTTTGCCAGAAAGAAGATGGGGAGGAGGCAGTAATAA
AAAGATTGAAGTATTTTGTGGAATAAGTTCAAATCTTCTGAACCTCAAACCTGAGGAATTTACCTGTAAACCTG
AGTCGTACAGAAAGCTGCCTGGTATATCCAAAAGCTTTTTATTCTCTGCTCATATTGTGATTCTGCCTTTGGG
GACTTTTCTTAAACCTTCAGTTATGATTTTTTTTTTTCATACACTTATTGGAACCTCTGCTTGATTTTTGCCTCTTCC
AGTCTTCTGACACTTTAATTACCAACCTGTTACCTACTTTGACTTTTTGCAATTTAAACAGACACTGGCATGGA
TATAGTTTTACTTTTAACTGTGTACATAACTGAAATGTGCTATACTGCATACTTTTTAAATGTAAAGATATTT
TTATCTTTATATGAAGAAAATCACTTAGGAAATGGCTTTGTGATTCAATCTGTAAACTGTGTATTCCAAGACATG
TCTGTTCTACATAGATGCTTAGTCCCTCATGCAATCAATTACTGGTCCAAAAGATTGCTGAAATTTTATATGCT
TACTGATATATTTTACAATTTTTTATCATGCATGTCTGTAAAGGTTACAAGCCTGCACAATAAAAATGTTTAAAC
GGTT

WO 2004/030615

PCT/US2003/028547

2601/6881
FIGURE 2392

MSGGKYVDSEGHLYTVPIREQGNIYKPNNKAMADELSEKQVYDAHTKEIDLVRDPKHLNDDVVKIDFEDVIAEP
EGTHSFDGIWKASFTTFTVTKYWFYRLLSALFGIPMALIWGIYFAILSFLHIWAVVPCIKSFLIEIQCISRVYSI
YVHTVCDPLFEAVGKIFSNVRINLQKEI

WO 2004/030615

PCT/US2003/028547

2602/6881
FIGURE 2393

TTTGTGCGCCAGAAGGAAGATGGCGGATCTGGAGGAGCAGTTGTCTGATGAAGAGAAGGTGCGTATAGCAGCAAAA
TTCATCATTCATGCCCCCTCCTGGAGAATTTAATGAGGTTTTCAATGATGTTTCGGTTACTGCTTAATAATGACAAT
CTTCTCAGGGAAGGAGCAGCCCATGCATTTGCACAGTATAACTTGGACCAGTTTACTCCAGTAAAAATTGAAGGT
TATGAAGATCAGGTATTGATAACAGAACATGGCGACTTGGGAAATGGAAAGTTTTTTGGATCCAAAGAACAGAATC
TGTTTTAAATTTGATCACTTAAGGAAGGAGGCAACTGATCCAAGACCCCTGTGAAGTAGAAAATGCAGTTGAATCA
TGGAGAACTTCAGTAGAACTGCTCTGAGAGCTTACGTAAAAGAACATTACCCGAATGGAGTCTGCACTGTGTAT
GGCAAAAAAATAGATGGACAGCAAACCATTATTGCATGCATAGAAAGCCATCAGTTCCAAGCAAAAAATTTTTGG
AATGGTCGTTGGAGGTCAGAATGGAAGTTTACAATCACTCCTTCAACCACTCAAGTGGTTGGCATCTTGAAAATT
CAGGTTCAATTATTATGAAGATGGTAATGTTTCAGCTAGTGAGTCATAAAGATATACAAGATTCCCTAACAGTGTCT
AATGAAGTGCAAACAGCAAAAGATTTATAAAGATTGTAGAAGCTGCAGAAAATGAATACCAGACTGCCATCAGT
GAGAATTATCAGACAATGTCGGACACTACTTTCAAAGCCTTACGTCGACAGTTGCCAGTTACACGCACTAAGATT
GATTGGAACAAGATCCTTAGCTACAAGATTGGCAAAAGAGATGCAGAATGCATAAGATGAACATTGCATGACCGGA
TCATTTTAGTGTCCTTGC

WO 2004/030615

PCT/US2003/028547

2603/6881
FIGURE 2394

MADLEEQLSDEEKVRIA AKFI IHAPPGEFNEVFNDVRL LLNNDNLLREGAAHAF AQYNLDQFTPVKIEGYEDQVL
ITEHGD LGNGKFLDPKNRICFKFDHLRKEATDPRPCEVENAVESWR TSVETALRAYVKEHY PNGVCTVYGKKIDG
QQTIIACIESHQFQAKNFWNGRWRSEWKFTITPSTTQVVGILKIQVHY YEDGNVQLVSHKDIQDSLTVSNEVQTA
KEFIKIVEAAENEYQT AISENYQTMSDTTFKALRRQLPVTRTKIDWNKILSYKIGKEMQNA

WO 2004/030615

PCT/US2003/028547

2604/6881
FIGURE 2395

CTCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGT
GCAACCTGTTTCGCTGTACTAACTGTGCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAAATTCGTCATTTCGAAA
CATAGTGGAGGCCGTAGCAGTCAGGGACATTTCTGAAGCAAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTA
TGTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCCGCAA
GGACCGAACACCCCCACCCAGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCCACCAAAGCCCATGTAAGGAGC
TGAGTTCTTAAAGACTGAAGACAGGTTATTCTCTGGAGAAAAATAAAATGGAAATTGTA

WO 2004/030615

PCT/US2003/028547

2605/6881
FIGURE 2396

TGGAGCTAAGCTGTTTCCAGGGTGACAGAGTGGCGACCTCGGTGGTCGATTGAGCAGGTCTGAGAATTGTTCCCA
AAGGGTTGTGCGTCACCGAGTCGTTGGCGCTGTCAATGGCGGGTGTGCTGAAGAAGACCACTGGCCTTGTGGGATT
GGCTGTGTGCAATACTCCTCACGAGAGGCTAAGAATATTGTACACAAAGATTCTTGATGTTCTTGAGGAAATCCC
TAAAAATGCAGCATATAGAAAGTATACAGAACAGATTACAAATGAGAAGCTGGCTATGGTTAAAGCGGAACCAGA
TGTTAAAAAATTAGAAGACCAACTTCAAGGCGGTCAATTAGAAGAGGTGATTCTTCAGGCTGAACATGAACTAAA
TCTGGCAAGAAAAATGAGGGAATGGAACTATGGGAGCCATTAGTGGAAGAGCCTCCTGCCGATCAGTGGAATG
GCCAATATTAAATTATTAAGTGACTTTGGTGTGTTTCATGGGAACTGATGTAATTAAATATTCTGTTATATTAAGAG
CGTGTTCCTTATTACTGACATTTTGTAAATCAAGAAAAGTGATATAGAAAATATGTAGGAGACTGTTAAAATTGGTG
ATTATGGTAATATGGTCATGTGAATCAATTTTTGATTTATAAAGTACTCACACAAGTTGTTTCAAAGATGATATT
TCTGTGAACAGAGAGGCCATGGGAAGATTTGAAAATTATTAAAGAAAAATTCCTACAGATTTTCAATGCAGAGAC
CATAATCAAAAAGTAAACTTTCTTTAGTAGTATGTTCAATACATCATTTAATTTTTTAAGTTATCCTGAAGAAGG
AAAGGTCCTTAATTATTATAGTCTAAACAAATTTATAGATTACTGTTTGAAGTAAATAATACGAGTGAATATTTT
CAAATGTGATAAAAATAGCACAAAGTGGCTGGTGATAAAATTTGAAATTATGGTTAACCTCAGCTGTGATCTTATGT
ATGTAAAGTGAAATTTAAATAGATAATTATAGGTTGATTACAAAATCCATAGTGTCAATTTATTTTAGTCATTAT
TGAATTATACCATTTACTCTGTTTTCTTATAGTCTTAATTTTATTATATTTGTTGTTACTGTATTATATTTGAA
AACCTTCAAATTAGAATACATTGTACAGTTAAAGAAATTGACTTGGTACTTAAAAGAAAGATTTCCCATTCGATA
CAGGTTATTGGAGAAATTTTCTTTTGTGCAATTTGTGGAAGTTAGTTTTCTGGCCCGTGGCCTTTAATTTTCTT
AATCAACCTAATTACATCAGGATAGAGGTAGAGTTTCTGTAAAAGAAGAGACATTAAGAGTTCCTGAAATTTATA
TCTGGCATACCGATAGGCTTATATTCAAAACATCTTAGTCATACGACCATAAATTTAAAGTGGAGTCACTAAATA
GTTTGCAGTACGTTTCTAATATAAGTGTAGGTGGGTATCAAAACAAGACAAATGCTGTTTCAGGGAAAGAAGTTGG
CAAGCTTAAGGTTAAACAAAAATAAAATTACATGTGTTTTCGCCTTCCTA

WO 2004/030615

PCT/US2003/028547

2606/6881
FIGURE 2397

MAGVLKKTGTLVGLAVCNTPHERLRILYTKILDVLEEIPKNAAYRKYTEQITNEKLAMVKAEPDVKKLEDQLQGG
QLEEVILQAEHELNLARKMREWKLWEPLVEEPPADQWKWPI

WO 2004/030615

PCT/US2003/028547

2607/6881
FIGURE 2398

CCGCGTCGGTGCCCGCGCCCCCTCCCCGGGCCCCGCCATGGGCCTCACCGTGTCCGCGCTCTTTTCGCGGATCTTC
GGGAAGAAGCAGATGCGGATTCTCATGGTTGGCTTGGATGCGGCTGGCAAGACCACAATCCTGTACAAACTGAAG
TTGGGGGAGATTGTCACCACCATCCCAACCATAGGCTTCAATGTAGAAACAGTGGAATATAAGAACATCTGTTTC
ACAGTCTGGGACGTGGGAGGCCAGGACAAGATTTCGGCCTCTGTGGCGGCACTACTTCCAGAACACTCAGGGCCTC
ATCTTTGTGGTGGACAGTAATGACCGGGAGCGGGTCCAAGAATCTGCTGATGAACTCCAGAAGATGCTGCAGGAG
GACGAGCTGCGGGATGCAGTGCTGCTGGTATTTGCCAACAAGCAGGACATGCCCCAACGCCATGCCCGTGAGCGAG
CTGACTGACAAGCTGGGGCTACAGCACTTACGCAGCCGCACGTGGTATGTCCAGGCCACCTGTGCCACCCAAGGC
ACAGGTCTGTACGATGGTCTGGACTGGCTGTCCCACGAGCTGTCAAAGCGCTTAACCAGCCAGGGGCAGGCCCTG
ATGCCCGGAAGCTCCTGCGTGCAATCCCCGGGATGACCAGACTCCCGGACTCCTCAGGCAGTGCCCTTTCTCCCA
CTTTTCTCCCCATAGCCACAGGCCTCTGCTCCTGCTCCTGCCTGCATGTTCTCTCTGTTGTTGGAGCCTGGAG
CCTTGCTCTCTGGGCACAGAGGGGTCCACTCTCCTGCCTGCTGGGACCTATGGAAGGGGCTTCCTGGCCAAGGCC
CCCTCTTCCAGAGGAGGAGCAGGGATCTGGGTTTTCTTTTTTTTTCTGTTTTGGGTGTACTCTAGGGGCCAGGT
TGGGAGGGGGAAGGTGAGGGCTTCGGGTGGTGCTATAATGTGGCACTGGATCTTGAGTAATAAATTTGCTGTGGT
TTG

WO 2004/030615

PCT/US2003/028547

2608/6881
FIGURE 2399

MGLTVSALFSRIFGKKQMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNICFTVWDVGGQDKIR
PLWRHYFQNTQGLIFVVDSDNRERVQESADELQKMLQEDELRDVLLVFANKQDMPNAMPVSELTDKLGLQHLRS
RTWYVQATCATQGTGLYDGLDWLSHELKR

WO 2004/030615

PCT/US2003/028547

2609/6881
FIGURE 2400

GCGAGTAGAACGTGTGGCGGCGGCGGAGATCGCGTCTCTTTTCGCTCCGTGTCCCGCTGCTGCTCCTGTGAGCGCC
CGGCGAGTCCGTCCCGTCCACCGTCCGCAGCTGGTAGCCAGCCTGCCCTCGCTCGACTCCCTTTACCAACAC
CGACACCCACATTGACACCTCCAGTCCGGCCAGCCGCTCCACTCGTTGCCTTTGCATCTCCACACATGGCGTCCT
CCGCGCAGAGCGGCGGCTCCTCCGGGGGACCCGCGGTCCCCACCGTGCAGCGGGGCATCATCAAGATGGTCCTCT
CAGGGTGCGCCATCATTGTCCGAGGTGAGCCTCGTGGTGGGCTCCTCCTGAGCGGCAGATCAACCTCAGCAACA
TTCGTGCTGGAAATCTTGCTCGCCGGGCAGCCGCCACACAACCTGATGCAAAGGATACCCCTGATGAGCCCTGGG
CATTTCCAGCTCGAGAGTTCTTTCGAAAGAAGCTGATTGGGAAGGAAGTCTGTTTCAGGATAGAAAAACAAGACTC
CCCAGGGGCGAGAGTATGGCATGATCTACCTTGGAAAAGATACCAATGGGGAAAAATTGCAGAATCACTGGTTG
CAGAGGGCTTAGCCACCCGGAGAGAAGGCATGAGAGCTAATAATCCTGAGCAGAACCGGCTTTCAGAATGTGAAG
AACAAGCAAAGGCAGCCAAGAAAGGGATGTGGAGTGAGGGGAACGGTTCACATACTATCCGGGATCTCAAGTATA
CCATTGAAAACCCAAGGCACTTTGTGGACTCACACCACCAGAAGCCTGTTAATGCTATCATCGAGCATGTGCGGG
ACGGCAGTGTGGTCAGGGCCCTGCTCCTCCAGATTACTACCTGGTTACAGTCATGCTGTCAGGCATCAAGTGCC
CAACTTTTCGACGGGAAGCAGATGGCAGTGAAGTCCAGAGCCTTTTGTGTCAGAGCCAAATTTTTCAGTGAAGT
CGCGACTGCTTCAGAGAGATGTTTCAGATCATCTGGAGAGCTGCCACAACCAGAACATTCTGGGTACCATCCTTC
ATCCAAATGGCAACATCACAGAGCTCCTCCTGAAGGAAGGTTTCGCACGCTGTGTGGACTGGTCGATTGCAGTTT
ACACCCGGGGCGCAGAAAAGCTGAGGGCGGCAGAGAGGTTTGCCAAAGAGCGCAGGCTGAGAAATATGGAGAGACT
ATGTGGCTCCACAGCTAATTTGGACCAAAGGACAAGCAGTTTGTGTTGCAAGGTGATGCAGGTTCTGAATGCTG
ATGCCATTGTTGTGAAGCTGAACTCAGGCGATTACAAGACGATTACCTGTCCAGCATCCGACCACCGAGGCTGG
AGGGGGAGAACACCCAGGATAAGAACAAAGAACTGCGTCCCTGTATGACATTCTTACATGTTTGAGGCCCCGGG
AATTTCTTCGAAAAAGCTTATTGGGAAGAAGGTCAATGTGACGGTGGACTACATTAGACCAGCCAGCCAGCCA
CAGAGACAGTGCCTGCCTTTTCAGAGCGTACCTGTGCCACTGTCACCATTGGAGGAATAAACATTGCTGAGGCTC
TTGTTCAGCAAAGGTCTAGCCACAGTGATCAGATACCGGCAGGATGATGACCAGAGATCATCACTACGATGAAC
TGCTTGCTGCAGAGGCCAGAGCTATTAAGAAATGGCAAAGGATTGCATAGCAAGAAGGAAGTGCCTATCCACCGTG
TTGCAGATATATCTGGGGATACCCAAAAAGCAAAGCAGTTTCTGCCTTTTCTTCAGCGGGCAGGTCGTTCTGAAG
CTGTGGTGAATACGTCTTCAGTGGTTCTCGTCTCAAACCTCTATTTGCCAAAGGAACTTGCTTATCACCTTCT
TGCTTGCAAGCATTGAATGCCCCAGAGGAGCCCGAAACCTCCAGGCTTGGTGCAGGAAGGAGAGCCCTTCAGCG
AGGAAGCTACACTTTTCACCAAGGAACCTGGTGTGTCAGCGAGAGGTGAGGTGGAGGTGGAGAGCATGGACAAGG
CCGGCAACTTTATCGGCTGGCTGCACATCGACGGTGCCAACCTGTCCGTCTGCTGGTGGAGCACGCGCTCTCCA
AGGTCCACTTCACCGCCGAACGCAGCTCCTACTACAAGTCCCTGCTGTCTGCCGAGGAGGCCGCAAAGCAGAAGA
AAGAGAAGGTCTGGGCCCACTATGAGGAGCAGCCCGTGGAGGAGGTGATGCCAGTGTGAGGAGAAGGAGCGAT
CTGCTAGCTACAAGCCCGTGTGTTGTGACTGAGATCACTGATGACCTGCACCTTCTACGTGCAGGATGTGGAGACCG
GCACCCAGTTGGAGAAGCTGATGGAGAACATGCGCAATGACATTGCCAGTCACCCCTGTAGAGGGCTCCTATG
CCCCCGCAGGGGAGAGTTCTGCATTGCCAAATTTGTAGATGGAGAATGGTACCGTGCCCGAGTAGAGAAAGTCG
AGTCTCCTGCCAAAATACATGTCTTCTACATTGACTACGGCAACAGAGAGGTCTGCCATCCACCCGCTGGGTA
CCCTATCACCTGCCTTCAGCACTCGGGTGTGTCAGCTCAAGCCACGGAGTATGCCTTCGCCTTCATCCAGGTGC
CCCAAGATGATGATGCCCGCACGGACGCCGTGGACAGCGTAGTTTCGGGATATCCAGAACTCAGTGCCTGCTCA
ACGTGGAACACCTGAGTGCCGGCTGCCCCATGTACCCCTGCAGTTTGCAGATTCCAAGGGCGATGTGGGGCTGG
GCTTGGTGAAGGAAGGGCTGGTCATGGTGGAGGTGCGCAAGGAGAAACAGTTCCAGAAAGTATCACAGAATACC
TGAATGCCCCAAGAGTCAGCCAAGAGCGCCAGGCTGAACCTGTGGCGCTATGGAGACTTTTCAGCTGATGATGCAG
ACTGCCCTCGTCCAGCTCTCTGTCCAACCTGTTGATTATGTGATTTTTCTGATACGTCCATTCTCAAATGCCAGT
GTGTTACATCTTCGCTCTGGCCAGCCCATCTGTATTTAAAGCTTTTGAGGCCCAATAAAATAGTACGTGCTGT
C

WO 2004/030615

PCT/US2003/028547

2610/6881
FIGURE 2401

MASSAQSGSSGGPAVPTVQRGIIKMLVSGCAIIVRGQPRGGPPPERQINLSNIRAGNLARRAAATQPDADTPD
EPWAFPAREFLRKKLIGKEVCFTIENKTPQGREYGMIIYLGKDTNGENIAESLVAEGLATRREGMRANNPEQNRLS
ECEEQAKAAKGMWSENGSHTIRDLKYTIENPRHFVDSHHQKPVNAIIHVVDGSSVVRALLLPDYLLVTVMLSG
IKCPTFRREADGSETPEPFAAEAKFFTESRLLQRDVQIIIESCHNQNILGTILHPNGNITELLKEGFARCVDS
IAVYTRGAEKLRAAERFAKERRLRIRWDYVAPTANLDQDKQFVAKVMQVLNADAIVVKLNSGDYKTIHLSSIRP
PRLEGENTQDKNKKLRPLYDIPYMFEAREFLRKKLIGKKVNVTVDYIRPASPATETVPAFSERTCATVTIGGINI
AEALVSKGLATVIRYRQDDQQRSSHYDELLAAEARAIKNGKGLHSKKEVPIHRVADISGDTQKAKQFLPFLQAG
RSEAVVEYVFGSRLKLYLPKETCLITFLLAGIECPRGARNLPGLVQEGEPFSEEATLFTKELVLQREVEVEVES
MDKAGNFIGWLHIDGANLSVLLVEHALSKVHFTAERSSYYKSLLSAEEAAKQKKEKVWAHYEEQPVEEVMPVLEE
KERSASYKPVFVTEITDDLHFYVQDVETGTQLEKLMENMRNDIASHPPEGSYAPRRGEFCIAKFVDGEWYRARV
EKVESPAKIHVFYIDYGNREVLPSTRLGTLSPAFSTRVLPAQATEYAFAFIQVPQDDDARTDAVDSVVRDIQNTQ
CLLNVEHLSAGCPHVTLQFADSKGDVGLGLVKEGLVMVEVRKEKQFQKVITEYLNQESAKSARLNLWRYGDFRA
DDADCPRPSSLSNC

WO 2004/030615

PCT/US2003/028547

2611/6881
FIGURE 2402

TCGGAAGGGGCCAGGAGACACTGGAAGGTCCGGACGGCAGGGAAGGGGACGGGGTTCTTTCCAGTCCCCACCCGTG
TAGGGACACCTCTCCCCCTCATCCCCGATGTACCCTCGCTGAATCTGGGATGGGAGAGACGAACCGAGTCTAGG
CATCTGCGTAGCAGCGCCGGGGAGAGCGGGGAGCCCAGGGCGGAGCCCAGTCGACTCCCCGATTCCCCTGCCCCG
CCCCCGGCACGAGGCCCCGCCCGGGCGGCCCGCCCCCTCCTCGGGACTCGACCGGGCTGCGCTCACTGCCCCAGCC
GGGGCCCCGGGAGCCTCCAGGCTCCCGCCCCGCCCTGAGCTGCGGCCTCCGCATGGAGGGGCCACTCACTCCACCA
CCGCTGCAAGGAGGCGGAGCCGCCGCTGTTCCGGAGCCCGGAGCCCGGCAACACCCGGGACACGAGACGGCGGGCG
CAGCGGTACAGCGCCCCGACTGCTGCAGGCCGGCTACGAGCCCCGAGAGCCCTAGATTGGACCTCGCTACACACCCG
ACGACACCCCGTTTCAAGAACTATCTTACGTGGTCTTACTGGCAGGTGTTGGTGTCCAGATGGATCGCCTTCGCAAG
GCTAGCATGGCGGACTACCTGATCAGCGCGGCACCGGCTACGTGCCGAGGATGGGCTCACCGCGCAGCAGCTC
TTCGCCAGCGCCGACGGCCTCACCTACAACGACTTCCTGATTCTCCCAGGATTCATAGACTTCATAGCTGATGAG
GTGGACCTGACCTCAGCCCTGACCCGGAAGATCACGCTGAAGACGCCACTGATCTCCTCCCCCATGGACACTGTG
ACAGAGGCTGACATGGCCATTGCCATGGCTCTGATGGGAGGTATTGGTTTCATTACCCACAACCTGCACCCCAGAG
TTCCAGGCCAACGAGGTGCGGAAGGTCAAGAAGTTTGAACAGGGCTTCATCACGGACCCCTGTGGTGTGAGCCCC
TCGCACACTGTGGGCGATGTGCTGGAGGCCAAGATGCGGCATGGCTTCTCTGGCATCCCCATCACTGAGACGGGC
ACCATGGGCAGCAAGCTGGTGGGCATCGTCACCTCCCGAGACATCGACTTTCTTGCTGAGAAGGACCACACCACC
CTCCTCAGTGAGGTGATGACGCCAAGGATTGAAGTGGTGGTGGCTCCAGCAGGTGTGACGTTGAAAGAGGCAAAAT
GAGATCCTGCAGCGTAGCAAGAAAGGGAAGCTGCCTATCGTCAATGATTGCGATGAGCTGGTGGCCATCATCGCC
CGCACCGACCTGAAGAAGAACCAGACTACCCTCTGGCCTCCAAGGATTCCCAGAAGCAGCTGCTCTGTGGGGCA
GCTGTGGGCACCCGTGAGGATGACAAATACCGTCTGGACCTGCTCACCCAGGCGGGCGTCGACGTCATAGTCTTG
GACTCGTCCCAAGGGAATTCCGGTGTATCAGATCGCCATGGTGCATTACATCAAACAGAAGTACCCCCACCTCCAG
GTGATTGGGGGGAACGTGGTGACAGCAGCCAGGCCAAGAACCTGATTGATGCTGGTGTGGACGGGCTGCGCGTG
GGCATGGGCTGCGGCTCCATCTGCATCACCCAGGAAGTGATGGCCTGTGGTTCGGCCCCAGGGCACTGCTGTGTAC
AAGGTGGCTGAGTATGCCCCGGCGCTTTGGTGTGCCATCATAGCCGATGGCGGCATCCAGACCGTGGGACACGTG
GTCAAGGCCCTGGCCCTTGAGCCTCCACAGTGATGATGGGCTCCCTGCTGGCCGCCACTACGGAGGCCCTGGC
GAGTACTTCTTCTCAGACGGGGTGCGGCTCAAGAAGTACCGGGGCATGGGCTCACTGGATGCCATGGAGAAGAGC
AGCAGCAGCCAGAAACGATACTTCAGCGAGGGGGATAAAGTGAAGATCGCGCAGGGTGTCTCGGGCTCCATCCAG
GACAAAGGATCCATTCAAGAGTTTGTGCCCTACCTCATAGCAGGCATCCAACACGGCTGCCAGGATATCGGGGCC
CGCAGCCTGTCTGTCTTCCGGTCCATGATGTACTCAGGAGAGCTCAAGTTTGAGAAGCGGACCATGTGCGCCAG
ATTGAGGGTGGTGTCCATGGCCTGCACTCTTACGAAAAGCGGCTGTACTGAGGACAGCGGTGGAGGCCGAGGTGG
TGAGGGGGATGCACCCAGTGTCCACTTTTGGGCACAGCCTCCCTCCATAACTGAGTGGTCCACAGATTGCACT
ACGGGTTCTCCAGCTCCTTTCCAGGCAGAGAGGGGAGGTCCCTGAGGGGACTGCTGCCCCCTCACTCGGCATCC
CCTGCAGAGTCAGGACTGCTCCCGGGGCCAGGCTGCCCTGGGAGCCCCCTCCGAGCCAGCCAGCCAGGCTCTC
AGGCCCTGCGCCTGCTCAGGTCTTTCTTGCTGCAGCCTGCTCCAGCCTGGCCCCCAGCCAGGGCAGGCGGCC
CCTCCTGGCTTCTCCTGTAGGGACCTCCCTGCCCTAGCCTCCAGGAAATGGTGTCTCCTGGCCCTGCTCT
GGCCCTTCCCGGGCGCTGCCCTCAGCCATGTGGCACTTCTGAGCTCCTGACCTAGGCCAAGGGGAGGTCTCTG
CCCCCTTCCCGGCCCTGGGCTACCCCTGGGTCTGCTCCTCAGGCCGCTCCCTGTCCCTGGCCATGGGTAGGA
GACTGCCCTGGTCAAGGCCGCTGCTGTATTCTGACTCACCACCGTCCCCAGGTGAACCATTCCTCCCTTCT
CCTCAGCTGCAGTCGAAGGCTTTAACTTTGCACACTTGGGATCACAGTTGCGTCATTGTGTATTAAATACTTGA
ATAAATCAAGCAGGT

WO 2004/030615

PCT/US2003/028547

2612/6881
FIGURE 2403

TTTCCAGCCCCAGCCCCGGACCCTGCAGCCGCAGAGATGTTGACGCCTAAGAAGAACCGGATTGCCATTTATGAA
CTCCTTTTTTAAGGAGGATGGTCATGGTGGCCAAGAAGGATGTCCACATGCCTAAGCACCCAGAGCTGGCAGACAA
GAATGTGCCCCAACCTTCATGTCATGAAGGCCATGCAGTCTCTCAAGTCCCGAGGCTACGTGAAGGAACACTTTGC
CTGGAGACATTTCTACTGGTACCTTACCAATGAGGGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCCGGA
GATTGTGCCTGCCACCCTACCCCGTAGCCGTCCAGAGACTGGCAGACCTTGGCCTAAAGGTCTGTATGTGAGGAG
TGCTGTGCTACCTGGTGGCGACAAGAAAGCCGAGGCTGGGGCTGGGTCAGCAACCGAATTCTAGTTTAGAGGCGG
ATTTGGTCGTGGACGTGGTCAGCCACCTCAGTAAACTGGAGAGGATTCTTTTGCATTGAATAAACTTACAGCCA
AAAAA

WO 2004/030615

PCT/US2003/028547

2613/6881
FIGURE 2404

TGGGATTACAGGTAAGTGCCACCACACCCAGCTGATTTTTGTGTTTTTTGTAGAGACGAGGTTTCGCCATGTTTC
CCAGACTGTTCTCAAACCTCTGAGCTCAAAGCAGTCCACCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGTG
TGAGCCACCTTGCTCATTCTAGTTTAAACTTTGGAGTGGTTTTGTGCTCCTGATTGGACTCCTGCAAATACAGAA
TTGATGCTAGGAAGGGTACCAGGAGATAGACGCACACAGATGGGATTGGGAATAGGTTTGGTTATCCAAGGAGC
AGTGCTGAGCTCCTTGCTAATGGGATATGGGATGCTGGTGATTTCAGTAAGTGACCTCAAATTTACTCAGGCTA
CCACATACTGTTGATTGTGATGAAATGCCAGTTGAAGCACCTGTCTGCGAGCTTAGGGGTGCTACAAGTTGACC
ACTGCAGCAGTAAAGATGACTCTGAAGAATGGCATGGGATGGATCCTTTGAAATGCACTTGAGCAGCGGTCTCCA
ACCACAGGGCCACAGAGCTGGAGCTGGATCTACCATGAAAGACCTCTGAATCCAGGAAGAGAGACTGACTGAGCA
ACATGTTATTTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTAAGACGCCCACTGATTCTACATTATGCTCC
TACCTCCCGGCAGCCTCTCCAGGCCCAGAACTTTCTCCAATCAGCCTCTACAGACCAAGCTCATGACTCACAATG
GCCTATTTAGGCCCATACCTACGTACGGCAGTCTCCGCAGATGAGCCTACTGCCCCACAACAGCCTCCACAGG
CACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCCTCCAGCCTTCTCTCCAGGCCCTGAACTTT
CTCAAGTCGACCTCACCAGGCCCAGCTCATGCTTCTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGC
CCCTCCAGGCCCAGCCTCTGCCTCCCGTCGGCCTCTACAGTCCCAACATCTGCCTCACAGCAGATTCTTCACGCC
CAGCATCTGCCTCACTGTGGACCCCCAAGCCAAGCTCCCAACCTTTACAGCAGCTTCTACACACCCAGCTCCTGC
CACCCAGTGGCCTCTTTAGGCCAAGCTCATGCTTCACAAGGGCCTTTCCAGGCCCAACTTTTGTCTCATGGCAAC
CTTCCCTGGCCAGATTCTGCCTGTCTCCAGCAGCCTAGACAGGCCCAGGGCCTCTCTACATGCAGCTTATGCC
TCACGGTGGCCTCTCCAGGCCCAACTCCTGTCCAGGACGTATCTCCGGGGCCCAAACTTACTCAAGTCAGACT
CTGTAGTCCCAACTGCTGCCTCCTGGTGGCCTATGAAGGCCCAAAATCTCCTCAAGTTGACCTTTCCAGGCCCAG
CTCCTGCCTCCTGTGAGCGTCTACAGGCCCAACCTCTACGTATGGGGGCTTCTCCAGGCCCACCTCTTCTCTT
GGCTGGGTCTACAGGCACAACCTGCTGCCTCACAACAGCCTTTTTTGGCCAGTTCTGTCCAGCTCATGGCGGCC
AATGTAGGCCCAAACTTCTCAAGTCAAACCTCTCCAGGCCACCTTCTGCTTCCAGTGGCATGAACAGGCCCA
GCTTTGACTTGAGAACAGCCTCTGCAGGCCCTGCTCTTGCCTCCAGGGGCTTTTCCAGGCCCAGCTCTTGCCT
CATGGCAGCTGCCCCAGGCCAAATTTCTGCCTGCCTGCCAGCAGCCTCAACAGGCATAGCTCCTCCCTCACAGTG
GCCATTTAGGCCCAACTCATGACTGTGCGGCCATTTCCAGGCCTAGTGCCTGCCTCGTGGCTGACTCTTGAAGC
CCAAAACCTTCTCAAATCAGCCTTTTGCCCAACTTCTGTCTACTGTCGGACTCTACAGGCCAGCCTCTGCCTCAC
AGTGGACCCCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGTCGAAGCTCCTGCCTTTCCGGCAGCCTCTC
CAGGCCCAGCTCCTCCTGCCTCCAGTGGCCTCTTTCGGCCAGC

WO 2004/030615

PCT/US2003/028547

2614/6881
FIGURE 2405

MLLPGLSRPRTFSNQPLQTKLMTHNGLFRPIPVVTAVSADEPTAPQQPPQAQLHRYNGLFRPSSCLPAFSPGP
ELSQVDLTRPSSCFFAASPGPAPASWWPLQAQPLFPVGLYSPNICLTADSSRPASASLWTPQAKLPTFQQLLHTQ
LLPPSGLFRPSSCFTRAFFPGPTFVSWQPSLARFLPVSQQPRQAQGLSTCSLCLTVASPGPTPVPGRHLRAQNLLK
SDSVVPTAASWWPMKAQNLLKLTFFGPAPASCQRLQAQPLRHGGFSRPTSSSWLGLQAQLLPHNSLFWPSSCPAH
GGQCRPKTSSSQTLQAHL LLPSGMNRPSFDLRTASAGPALASQGLFPGPALASWQLPQAKFLPACQQPQQA

WO 2004/030615

PCT/US2003/028547

2615/6881
FIGURE 2406

TCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTA
AGACGCCCAGTATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAAATAATGGAAATA
AAGTGCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAATCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCCATAACCCTACGTCAC
GGCAGTCTCCGCAGATGAGCCTACTGCCCCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCCAGCCTCTGCCTCCCCGT
CGGCCTCTACAGTCCCAACATCTGCCTCACAGCAGATTCTTCACGCCCAGCATCTGCCTCACTTGGACCCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGTCGAAGCTCCTGCCTTTCGGCAGCCTCTCCAGGCCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCAGCCTCTGC
CTCACAGCGGACTCTC

WO 2004/030615

PCT/US2003/028547

2616/6881
FIGURE 2407A

AGCCCAAACCGCGGCCCTAGCCCCGGCCGCACCCCCAGCCCGGCCAGCATGATGAACAACAGCGGCTACTCAGA
CGCCGGCCTCGGCCTGGGCGATGAGACAGACGAGATGCCGTCCACGGAGAAGGACCTGGCGGAGGACGCGCCGTG
GAAGAAGATCCAGCAGAACACATTACGCGCTGGTGCAATGAGCACCTCAAGTGCCTGGGCAAGCGCCTGACCGA
CCTGCAGCGCGACCTCAGCGACGGGCTCCGGCTCATCGCGTGCTCGAGGTGCTCAGCCAGAAGCGCATGTACCG
CAAGTTCATCCGCGCCCCAACTTCCGCCAAATGAAGCTGGAGAACGTGTCCGTGGCCCTCGAGTTCTCTGAGCG
CGAGCACATCAAGCTCGTGTCCATAGACAGCAAGGCCATCGTGGATGGGAACCTGAAGCTGATCCTGGGCCTGAT
CTGGACGCTGATCCTGCACTACTCCATCTCCATGCCATGTGGGAGGATGAAGATGATGAGGATGCCCGCAAACA
GACGCCCCAAGCAGCGGCTGCTTGGCTGGATCCAGAACAAGGTGCCCCAGCTGCCCATACCAACTTCAACCGTGA
CTGGCAGGACGGCAAAGCTCTGGGCGCCCTGGTGGACAACCTGCGCCCCGGTCTCTGCCCGACTGGGAGGCCTG
GGACCCCAACCAGCCCGTGGAGAACGCGCGGGAGGCCATGCAGCAGGCCGACGACTGGCTTGGGGTGCCCCAGGT
CATTGCCCCGTGAGGAGATTGTGGACCCCAACGTGGATGAGCATTCTGTTATGACCTACCTGTCCCAAGTTCCCCAA
GGCCAAGCTCAAACCTGGTGGCCCTGTTGATCCAAGCAGCTGAACCCCAAGAAAGCCATCGCCTATGGGCCTGG
CATCGAGCCACAGGGCAACACCGTGTGCAGCCTGCCACTTACCGTGCAGACGGTGGACGCGGGCGTGGGCGA
GGTGTGCTGTCTACATCGAGGACCTGAAGGCCACACCGAGGAGGCTAAGGTGGTTCCCAACAATGACAAGGATCG
CACCTATGCTGTCTCCTATGTGCCAAGGTGCTGGGTACACAAGGTGACCGTGCTCTTTGCTGGCCAGAACAT
TGAACGCAGTCCCTTTGAGGTGAACGTGGGCATGGCCCTGGGAGATGCCAACAAGGTGTGAGCCCGTGGCCCTGG
CCTGGAACCTGTGGGCAATGTGGCCAACAAACCCACCTACTTTGACATCTACACTGCGGGGGCCGGCACTGGCGA
TGTTGCTGTGGTGATCGTGGACCCACAGGGCGCGCGGACACAGTGGAGGTGGCCCTGGAGGACAAGGGTGACAG
CACGTTCCGCTGCACATACAGACCTGCCATGGAGGGGCCACATACCGTGCATGTGGCCTTTGCGGGTGCCCCCAT
CACCCGCAGTCCCTTCCCTGTCCATGTGTGCGGAAGCCTGTAACCCCAACGCCTGCCGCGCCTCTGGGCGAGGCCT
GCAGCCCAAGGGTGTTGCGGTGAAAGAGGTGGCTGACTTCAAGGTGTTTACCAAGGGTGCCGGCAGCGGGGAGCT
CAAGGTACGGTCAAGGGGCCAAAGGGCACAGAGGAGCCAGTGAAGGTGCGGGAGGCTGGGGATGGTGTGTTTGA
GTGCGAGTACTACCCGGTGGTGCTGGGAAGTATGTGGTGACCATCACGTGGGGCGGCTACGCCATCCCTCGCAG
CCCCTTTGAGGTACAGGTGAGCCCAGAGGCAGGAGTGCAAAAGGTCCGGGCCTGGGGTCTGGTTTGGAGACTGG
CCAGGTGGGCAAGTCAGCCGATTTTGTGGTGGGAAGCCATTGGCACCGAGGTGGGGACACTGGGCTTCTCCATCGA
GGGGCCCTCACAAGCCAAGATCGAATGTGACGACAAGGGGGATGGCTCCTGCGATGTGCGGTACTGGCCACGGA
GCCTGGGGAGTACGCTGTGCACGTCATCTGTGACGATGAGGACATCCGAGACTCACCTTCATTGCCCACATCCT
GCCCGCCCCACCTGACTGCTTCCAGATAAGGTGAAGGCCTTTGGGCCTGGCCTGGAGCCTACCGGCTGCATCGT
GGACAAGCCCGCTGAGTTACCATTTGATGCTCGTGACGTGGCAAGGGGAGACCTGAAGCTCTATGCCCAGGACGC
CGACGGCTGTCCCATCGACATCAAGGTGATCCCCAACGGCGACGGCACCTTCCGCTGCTCCTACGTGCCACCAA
GCCATTAAAGCACACCATCATCATCTCCTGGGGAGGCGTAAACGTGCCCAAGAGCCCCCTTCCGGGTGAACGTGGG
CGAGGGCAGCCACCCGAGCGGGTAAAGGTGACGGCCCCGAGTGGAGAAGACAGGCCTCAAGGCCAATGAGCC
CACCTACTTCACGGTGGACTGCAGCGAGGCGGGGCAAGGCGACGTGAGCATCGGCATCAAGTGCGCCCCAGGCGT
GGTGGCCCTGCAGAGGCTGACATTGACTTCGACATCATCAAGAATGACAACGACACCTTACCGTCAAGTACAC
GCCACCAGGGGCGGGCCGCTACACCATCATGGTGTGTTTGCAACCAGGAGATCCCCGCCAGCCCCCTTCCACAT
CAAGGTGGACCCATCCACGATGCCAGCAAAGTCAAGGCCGAGGGCCCTGGGCTGAATCGCACAGGTGTGGAAGT
CGGGAAGCCCAACCACTTACGGTGCTGACCAAGGGAGCCGGCAAGGCCAAGCTGGATGTGCAGTTTGCAGGGAC
AGCCAAGGGCGAGGTTGTGCGGGACTTTGAGATCATAGACAACCATGACTACTCCTACACTGTCAAGTACACCGC
TGTCCAGCAGGGCAACATGGCAGTGACAGTGACTTATGCGGGGACCTGTCCCCAAGAGCCCCCTTTGTGGTGAA
TGTGGCACCCCCGCTGGACCTCAGCAAAATCAAAGTTCAGGGCCCTTAATAGCAAGGTGGCTGTGGGACAGGAACA
AGCATTTCTGTGAACACACGAGGGGCTGGCGGTCAGGGCCAACCTGGATGTGCGGATGACTTCGCCCTCTCGCG
GCCATCCCTCCAGCTGGAGCCAGGCGGTGGAGCGGAAGCCAGGCTGTGCGCTACATGCCCCCGGAGGAGGG
GCCCTACAAGGTGGATATCACCTACGATGGTCAACCGGTGCCTGGCAGCCCGTTTGTGTGGAGGGTGTCTGCC
CCCTGATCCCTCCAAGGTCTGTGCTTATGGCCCGGGTCTCAAGGGTGGACTGGTAGGCACCCCCGCGCCATTCTC
CATCGACACCAAGGGGGCTGGCACAGGTGGCCTGGGGCTGACCGTAGAGGGCCCTGCGAGGCCAAGATCGAGTG
CCAGGACAATGGTGATGGCTCATGTGCTGTGAGCTACCTGCCCACGGAGCCTGGCGAGTACACCATCAACATCCT
GTTTGTGAGGGCCACATCCCTGGCTCGCCCTTCAAAGCCACCATTCGGCCTGTGTTTACCCGAGCAAGGTGCG
GGCAGTGGACCGGGCCTGGAGCGCGGCAAGGTGGTGAGGCAGCCACCTTCACTGTGGACTGCTCAGAGGCAGG

WO 2004/030615

PCT/US2003/028547

2617/6881
FIGURE 2407B

CGAGGCGGAGCTGACCATTGAGATCCTGTGCGGATGCCGGGGTCAAGGCCGAGGTGCTGATCCACAACAACGCGGA
TGGCACCTACCACATCACCTACAGCCCTGCCCTTCCCTGGCACCTACACCATTACCATCAAGTATGGCGGGCATCC
CGTGCCCAAATTCCCCACCCGTGTCCATGTGCAGCCTGCGGTGATACCAAGTGGCGTCAAGGTCTCAGGGCCTGG
TGTTGAGCCACACGGTGTCTGCGGGAGGTGACCACTGAGTTCACTGTGGATGCAAGATCCCTAACAGCCACAGG
CGGCAACCACGTGACGGCTCGTGTGCTCAACCCCTCGGGGGCCAAGACAGACACCTATGTGACAGACAATGGGGA
CGGCACCTACCGAGTGAGTACACCGCCTACGAGGAGGGCGTGATCTGGTGGAGGTCTGTATGATGAGGTTCGC
TGTGCCCAAGAGCCCTTCCGAGTGGGCGTGACCGAGGGCTGTGATCCCAACCGCGTCCGAGCCTTCGGGCCAGG
CCTGGAGGGTGGCTTGGTCAACAAGGCCAACCGATTCACTGTGGAGACCAGGGGAGCGGGCACCGGGGGCCTTGG
CCTAGCCATCGAGGGTCCCTCGGAAGCCAAGATGTCTGCAAGGACAACAAGGATGGTAGCTGCACCGTGGAGTA
CATCCCCCTTCACTCCTGGAGACTATGACGTCAACATCACCTTCGGGGGGCGGGCCATCCAGGGAGCCCCGTTCG
CGTGCCAGTGAAGGATGTGGTGGACCTGGGAAGGTGAAGTGCTCAGGGCCAGGGCTGGGGGCTGGTGTGAGGGC
CCGGGTTTCTCAGACCTTACAGTGGATTGCAAGTCAAGCTGGCCGGGCGCCCTGCGAGGTGGTGTGCTGGGCCC
CACAGGTGTGGCCGAGCCTGTGGAGGTGCGGGACAATGGAGATGGCACCCACACTGTCCACTACACCCAGCCAC
TGACGGGCCCCTACACGGTAGCCGTCAAGTATGCTGACCAGGAGGTGCCACGCAGCCCCCTTCAAGATCAAGGTCTT
CCCAGCTCATGATGCCAGCAAGGTGCGGGCCAGCGGCCAGGCCTCAACGCCTCTGGCATCCCTGCCAGCCTGCC
TGTGGAGTTCACCATCGACGCACGGGACGCGGGCAGGGGTTGCTCACTGTCCAGATCTTGGACCCCGAGGGTAA
GCCAAGAAGGCCAACATCCGGGACAATGGGGATGGCACGTACACTGTGTCTACCTGCCGGACATGAGTGGCCG
GTACACCATCACCATCAAGTATGGCGGTGATGAGATCCCTACTCGCCCTTCCGCATCCATGCTCTGCCCACTGG
GGATGCCAGCAAGTGCCCTCGTCACAGTGTCCATTGGAGGCCATGGCCTGGGTGCCTGCCTGGGCCCTCGAATCCA
GATTGGGCAGGAGACGGTGATCACGGTGGATGCCAAGGCAGCCGGTGAGGGGAAGGTGACATGCACGGTGTCCAC
GCCGGATGGGGCAGAGCTCGATGTGGATGTGGTTGAGAACCATGACGGTACCTTTGACATCTACTACACAGCGCC
CGAGCCGGGCAAGTACGTATACCATCCGCTTCGGGGGTGAGCACATCCCCAACAGCCCCCTTCCAGTGTCTGGC
GTGTGACCCCCTGCCGCACGAGGAGGAGCCCTCTGAAGTGCCACAGCTGCGCCAGCCCTACGCTCCTCCCCGGCC
CGGCGCCCGCCCCACACACTGGGCCACAGAGGAGCCAGTGGTGCTGTGGAGCCAATGGAGTCCATGCTGAGGCC
CTTCAACCTGGTCATCCCCCTTCGCGGTGCAGAAAGGGGAGCTCACAGGAGAGGTGCGGATGCCCTCGGGGAAGAC
GGCACGGCCCAACATCACCGACAACAAGGACGGCACCATCACGGTGAGGTATGACCCACTGAGAAAGGCCTGCA
CCAGATGGGGATCAAGTATGACGGCAACCACATCCCTGGGAGCCCCCTTACAGTTCTATGTGGATGCCATCAACAG
CCGCCATGTGAGTGCCATGGGCCAGGCCGTGAGCCATGGCATGGTCAACAAGCCAGCCACCTTCACTATTGTGAC
CAAAGATGTGGAGAAGGGGGTCTGTCACTGGCCGTGGAGGGCCCATCCAAGGCAGAGATCACTGTGAAGGACAA
CAAGGATGGCACCTGCACCGTGTCTATCTGCCGACTGCGCCTGGAGACTACAGCATCATCGTGCCTTCGATGA
CAAGCACATCCCGGGGAGCCCCCTTACAGCCAAGATCACAGGTGATGACTCCATGAGGACCTCACAGTGAATGT
GGGCACCTCCACGGACGTGTCACTGAAGATCACCGAGAGTGATCTGAGCCAGCTGACCGCAGCATCCGTGCCCC
CTCGGGCAACGAGGAGCCCTGCCTGCTGAAGCGCCTGCCCAACCGGCACATTGGGATCTCCTTACCCCCAAGGA
GGTCGGGGAGCACGTGGTGAGCGTGCAGCAAGGTGCGGAGCATGTACCAACAGCCCCCTTCAAGATCCTGGTGGG
GCCATCTGAGATCGGGGACGCCAGCAAGGTGCGGGCTTGGGGCAAGGGGCTTTCGAGGGACACACATTCCAGGT
GGCAGAGTTTCACTGAGGACACTCGCAATGCAAGGTATGGGGGCTTGGGGCTGAGTATTGAAGGCCAAGCAAGGT
GGACATCAACTGTGAGGACATGGAGGACGGGACATGCAAAAGTCACTACTGCCCCACCGAGCCCGGCACCTACAT
CATCAACATCAAGTTTGTGACAAGCACGTGCCTGGAAGCCCCCTTCACTGTGAAGGTGACCGGCGAGGGCCGCAT
GAAGGAGAGCATCACCCGGCGGAGACAGGCACCTTCCATCGCCACCATCGGCAGCACCTGTGACCTCAACCTCAA
GATCCAGGAAACTGGTTCCAGATGGTGTCTGCCAGGAGCGCCTGACACGCACCTTACACGCAGCAGCCACAC
CTACACCCGCACGGAGCGCACGGAGATCAGCAAGACGCGGGGCGGGGAGACAAAGCGCGAGGTGCGGGTGGAGGA
GTCCACCCAGGTGCGCGGGGACCCCTTCCCTGCTGTGTTTGGGGACTTCTGGGCCGGGAGCGCCTGGGATCCTT
CGGCAGCATCACCCGGCAGCAGGAGGTGAGGCCAGCTCTCAGGACATGACTGCACAGGTGACCAGCCCATCGGG
CAAGGTGGAAGCCGAGAGATCGTCGAGGGCGAGGACAGCGCCTACAGCGTGCCTTTGTGCCCCAGGAAATGGG
GCCCCATACGGTGCCTGTCAAGTACCGTGGCCAGCACGTGCCCGGCAGCCCCCTTTCAGTTCACTGTGGGGCCGCT
GGGTGAAGGTGGTGGCCACAAGGTGCGGGCCGGAGGCACAGGGCTGGAGCGAGGTGTGGCCGGCGTGCCAGCCGA
GTTTCAGCATCTGGACCCGGGAGGCTGGCGCTGGGGGCTGTCCATTGCTGTGGAGGGTCTAGCAAAGCGGAGAT
TGCATTTGAGGATCGCAAAGATGGCTCCTGCGGCGTCTCCTATGTCTCCAGGAACCAGGTGACTATGAGGTCTC

WO 2004/030615

PCT/US2003/028547

2618/6881
FIGURE 2407C

CATCAAGTTCAATGATGAGCACATCCCAGACAGCCCCCTTTGTGGTGCCTGTGGCCTCCCTCTCGGATGACGCTCG
CCGTCTCACTGTCAACAGCCTCCAGGAGACGGGGCTCAAGGTGAACCAGCCAGCGTCCTTTGCCGTGCAGCTGAA
CGGTGCCCCGGGGCGTGATTGATGCCCGGGTGCACACACCCTCGGGGGCTGTGGAGGAGTGCTACGTCTCTGAGCT
GGACAGTGACAAGCACACCATCCGCTTCATCCCCACGAGAATGGCGTCCACTCCATCGATGTCAAGTTCAACGG
TGCCACATCCCTGGAAGTCCCTTCAAGATCCGCGTTGGGGAGCAGAGCCAGGCTGGGGACCCAGGCTTGGTGTC
AGCCTACGGTCCCTGGGCTCGAGGGAGGCACTACCGGTGTGTTCATCAGAGTTCATCGTGAACACCCTGAATGCCGG
CTCGGGGGCCTTGTCTGTCAACATTGATGGCCCTCCAAGGTGCAGCTGGACTGTCGGGAGTGCTCTGAGGGCCA
TGTGGTCACTTATACTCCCATGGCCCTGGCAACTACCTCATTGCCATCAAGTACGGTGGCCCCCAGCACATCGT
GGGCAGCCCCCTTCAAGGCCAAGGTCACTGGTCCGAGGCTGTCCGGAGGCCACAGCCTTCACGAAACATCCACGGT
TCTGGTGGAGACTGTGACCAAGTCCTCCTCAAGCCGGGGCTCCAGCTACAGCTCCATCCCCAAGTTCTCCTCAGA
TGCCAGCAAGGTGGTGAAGTCCGCGGGCTGGGCTGTCCAGGCCTTCGTGGGCCAGAAAGTCTCTCACCCTGGA
CTGCAGCAAAGCAGGCACCAACATGATGATGGTGGGCGTGACGGCCCCAAGACCCCTGTGAGGAGGTGTACGT
GAAGCACATGGGGAACCGGGTGTACAATGTACCTACACTGTCAAGGAGAAAGGGGACTACATCCTCATTGTCAA
GTGGGGTGACGAAAGTGTCCCTGGAAGCCCCCTTCAAAGTCAAGGTCCCTTGAATCCCAAAGTGCCTCCCCAGCC
TCAGCCCCACCTCCAGCCACACACACATTACACACACACACACACACACAAATGTGCCACACCCAGACACGC
ACAGAATCAGACACTACAAACACCTGCCTTGGGGGTGAAGTGAAGGCCAGCCTCCCCACCCACCGCGCCCCAG
GGGTTGGAGGACCTTGTCTGTGTCAAGACAGTGTCCCTCCCTGGGAATGTGACATGAGGGCCGACTGGGGCCAGG
CTCAGGGGCGAGGCTGGGACACAAGGGGCTGGCGAGGGCTGCGAGGCCAGGGAAGCCCTGAGTTTCTGGCGGGG
CTGAGCAGTGGGGGAGCATTGTGTTGTGGGTGTCTGTGTGTGAGGTACCCCTCAAACATGCACCGCCGGCCAGATA
CCCTCCTGACCCCGAGGACTTGGTCTGGTCTCTCTGGTGGCTACAACCCAGAGTTTAAAGGACTTGAAAGGAA
AGCACAATCAGAGAAGAAAACAGCCCCGAACCAGCAGGAGTGGCCTGGCACATGGACCGGCCTGAGCGATGTGC
ACTCCACCCAAGCCAGGCTCCCAGGGGGCCTGATTTCTCTCTCACTGTCTCTTTTTTAAATGGTTGCACGGCT
CTGCCCCATGGGGGGCCTTTTTTACACACTGCGAGGCCAGCTTTCTAGGGGACTTTTGCACATGTCATGCAGCT
CAGCTGGGAGCTGCTTAGGTGGAAGTCCAAATAAAGTGC GGCTGTGCG

WO 2004/030615

PCT/US2003/028547

2619/6881
FIGURE 2408

MAPGNYLIAIKYGGPQHIVGSPFKAKVTGPRLSGGHS�HETSTVLVETVIKSSSSRGSSYNSIPKFSSDASKVVT
RGPGLSQAFVGQKNSFTVDCSKAGTNMMVGVGPKTPCEEVYVKHMGNRVYNVITYTVKEKGTTSLSSSGVTKVS
LEAPSKSRSLESQKCLPSLSPHLQPNTHYIHTHTHTNVPHPDHTQNQTLQTPALGVK

WO 2004/030615

PCT/US2003/028547

2620/6881
FIGURE 2409A

GGAGGCGGGGCGGACCAAGAGCAGGAGCTGGAGTCTGAGCCGGTGGTTGCAGCGGAGGCGGTGATGTCGGTGCAG
GTTGTGTTCAGCCGCGGCTGCCGCCAAGGTGCCCTGAGGTGGAGCTGAAGGACCTGAGCCCCCTCCGAGGCGGAGTCG
CAACTAGGACTGAGCACGGCCGCCGTGGGCGCCATGGCCCCCGGCGGGCGGTGGAGACCCCTGAGGCTCCAGCT
CCCGCCGCGGAGCGGCCCGCGTCCCCGGCCCGGGCTCGGGGCCCCGCCGCCGTCTCAGCCCCGCCCGGGGAAG
GTGCCTCAGGCGTCGGCCATGAAGCGGAGCGACCCACATCACCAGCACCAGCGGCACCGCGACGGCGGCGAGGCC
CTGGTCAGCCCCGACGGCACCGTCCACCGAGGCGCCGCGCACAGTCAAGAAGCAGATCCAGTTTGCTGACCAGAAG
CAAGAATTCAACAAACGTCCACCACAAATTGGACGTCGCTCTTTGTCTCGTTCCATTTCTCAGTCATCTACTGAC
AGCTACAGCTCAGCGGCTTCATATACAGATAGCTCTGATGATGAGACATCGCCAGGGACAAGCAGCAAAAAGAAC
TCTAAGGGAAGCAGTGACTTCTGTGTTAAGAACATCAAACAGGCAGAGTTTGGACGAAGAGAAATTGAAATTGCT
GAACAAGAAATGCCGTGCATTGATGGCTTTGAGGAAGAGAGCTCAAGGAGAAAAGCCTTTGGCTGGAGCCAAAATC
GTGGGTTGCACACACATCACTGCTCAGACTGCTGTGCTTATGGAACTCTGGGTGCTCTGGGGGCCAGTGCCGA
TGGGCTGCCTGCAACATCTATTCCACTCTCAATGAAGTGGCTGCTGCTCTAGCAGAAAAGTGGAATTCCTGTTTTT
GCCTGGAAGGGAGAGTCAGAAGATGACTTTTGGTGGTGTATCGATAGATGTGTGAATGTGGAGGGCTGGCAGCCA
AACATGATCTTGGATGATGGAGGGGATCTTACCCACTGGATTTATAAAAAGTATCCCAACATGTTAAGAAAATC
AAGGGCATAGTAGAGGAGAGTGTACTGGAGTTCACAGGCTGTACCAACTGTCCAAAGCTGGGAAGCTGTGTGTT
CCAGCCATGAATGTCAATGACTCAGTCACCAACAGAAATTTGACAACTCTACTGTTGCCGTGAATCAATTCTT
GATGGACTTAAAAGGACAACAGACATGATGTTTGGTGGAAAGCAAGTGGTAGTCTGTGGCTATGGAGAGGTGGGG
AAAGGTGCTGTGCTGCCCTGAAAGCCATGGGCTCCATTGTGTATGTAAGTGAATTTGACCCCATCTGTGCCCTG
CAAGCCTGTATGGATGGATTTGACTGGTGAATTTAAATGAGGTGATCCGACAAGTGACATTTGTTATTACCTGT
ACAGGTAACAAGAATGTGGTAACCAGAGAGCACTTGGACCGTATGAAGAATAGCTGCATCGTTTGAACATGGGA
CATTCACACAGAGATTGACGTGGCGAGTCTGCGGACACCAGAACTGACCTGGGAGCGAGTGAGATCTCAAGTT
GACCATGTGATATGGCCTGATGGCAAGAGGATAGTACTGCTGGCAGAGGGCCGCTGCTGAACCTTAGCTGCTCC
ACAGTGCCCTACATTTGTGCTCTCAATCACTGCTACTACTCAGGCTCTTGCTTGATAGAGCTTTACAATGCTCCT
GAGGGTCGCTATAAGCAGGATGTCTACCTGTTGCCAAGAAGATGGATGAGTATGTGGCCAGCCTACACCTGCCT
ACCTTTGATGCCCACTTGACAGAGCTGACAGATGAACAGGCCAAGTATCTGGGACTCAACAAGAATGGGCCCTTC
AAGCCTAATTACTACAGGTATTAAGTTCCTGTAACCTCAAACCAGAAATTTTAAGGAATAGAACTCCAAGCCTTTT
CTCCACTACTATACAAGAAAGAAATTCAGCAAGCTGCTTCTCCAATCAAAGCTGCCTGCCGTGCTCACCCTGTGTG
TTAGGTTATTTATTTATTTAAATCAAGAATCCTGTGCTGTAGTGTGGCCAGAGTGTGGTTACTGCTCCCTGAGG
GCCATGAAAGCCACAGAGGATGGGCTGAGGAAGGAAAGAAATGGGGTTACTGCTCCAGTGCAATTCATTCATCA
TTCCCCATTGACTGAATCCTCAGCAGTGGCCGTTTTTCTCTTGTCCAGGCTCAGAGTTAGTCCAGGGATTCCA
TACTCCCTATTCCCTGGAGTTTTCTGGAATAAATTTTCAGCACCTGCTTTTCTCAGCTTGCCCTTCCCCGGGTG
AGGCCGTTTGGAAATTAACATGGCCAGTGTTCACACAAGATTGGGTTCCCAATCTTGACCATCACTATCACTGCC
TTCTTTATATAAAGGCTAATAAGGAAGGAGTGTATTTATGGCTTTGCCAAGCTACATCAAGAAGCTCAGCTGTGC
TGTGCCCTACCAGGGGTCTCCTTTCTTACCCAGGACTCCTTTCTCTCCTTGAATATTTATGTCCATTTTAACT
TCTTGGTTGCAAGAGGGATGTGCCTCCATTATTTCTCCACAGTTTTTGGTATTTGTGACACATTTGTTCTGCTGT
CTTTCTAATCCAGCCAACGTCTGCTCAGGAAGTGGGGCCAGCTCCACTGGGACCCATAGTTTTACTTCTCTGTCA
TTTGATTGGATAGTTTTCCAAGGAAGCCCCCTCCAGATTGGCACTATCTCAGAAAAGGAGAGCTTGTGTGAAACAC
TGCTTCTGAAACTTCTGCTATTGCTTAAAGCTACGCTGAAACTGAGTAGGGAAAGGCATACTTTTCCAGGGA
CTTAGGGGGATAGGCTTTGGAAATGGGACAGGCTTTTCAGACTCACAGCTTGATACCCTAACAAAGCAGAGTATA
TTTATTTGTTTCCCAGGAAGGCCATTGCAAGTTTACTGGCTGAGGGATACAGAGATGAAATGTAAACTGTATCC
AGATTATCAAAGCTAATTTGACTAGTTTGAACCTCGTCAGACATTCATTCTTTGGCCATTGCCATGGATGAAAC
CGAGATCTGCAGTCTGATCTGTGGACTTCTCTGCTGGCATACTTTTATGATTTAACTCTTCCATTTGATGATT
CTGTATTTTCAAGATCAGTTTCTTGAGTAACTCCAGTGCTACAAAAAGAAATAGTAATGTGGTGTGGGCAGCGTGA
CATTTTATGTCCCAACCAAAATTTGGATTCTTTTGGAGACTGATCTGTTGGTCTCAGGCATTTTATTAGGACCA
GATTGGTTCTAAGAGTTAGTCTGGACTGGCCCTAGGAACTTGAATTAATAAGCCTCTTCCCCTTACCGATCCT
TTTTAACACTCTCAGGTTTGTGTTTCCCACTTTTTTCTATGCTGGTCTGCCTCAAAGTCTCAAGACCAAGGT
GACTCAAGATAACACCAGACCACGCATGATCAACAAAACCTTCCCATCCTGATTCTCTTCTTCTACCTCTACCT
CTCCAACCTCTCCTGGTCTTCACATATACTCTCAAAGCTAGTCTGAAAGTGACCTTACTTTTCCGAAGTAGGGAAG

WO 2004/030615

PCT/US2003/028547

2621/6881
FIGURE 2409B

TGGAAC TTTGGTAAATGACTGTTTGCCTCATTTAATAGTATACAGGCTCAGCCCATAGACTACAGTTCTTCAGAG
GCCATATGTCTCAGCAAGTACTGGTTATATTCTTTTTTTGTAAGGAAGATCATAAATGCTAAAAATTCCACTAAG
CCATTCAAGTTCTTCCTTTTGCCTACCTAGTCCTGATTTTTGTATTAAATTGGTTCCCTTTAGCAAGGGATTCAAGAT
CTTTGTACCTTATCTTATATCCAGAGCAGATTCCATTGGGCAGATAGATGGTCTCTAGCCTATTGTATTCTTAGA
CCAAAAATCATAACCTGCTGTTTCTCAGCAAAGCCTTGCTCTCTGGAGCTTACTATGTGCTGGTACTTAAAGAGT
ACATTCTGCCTTGCTGTAGTGAAGAGACCCACTCCAAATAAAAAAGGGGCCACACGGGGCTTCTAAGTTAGGTTG
CCAGTGTGCTGCCCATGATGAGTTATTTGCCCTCTGAGTTTCAGATGACCTCTCTGTAGGGGACACTGTGTTATCA
ACCATTAAGAAGAAAGAACCACAAGCCTCCCAAGTATTTGGGTTCTATCTTAGGGTTGAAATCTGGTCATTATTC
CCTCTACCCCTTGGAATCAGAGCAATGTGTCTTCTTTCCCTCCACCTCTTACCTTAGATGCATCCTGGTTATCTGG
AAGCATGGGAAAGAAGGCTACTTATCTCTTTGTATGTGGCTCCAGTCTGTGAGGATACATAACATTTCTCTACA
ATGAATCTGTGCTAATATTTTGCCTTCTTTCTTTCTTTCTTTTCCACCTTAGAGACAGGGTTCACTATGTTGC
CCAGGCTGGTCTCAAACCTCCTGGGCTCAAGCAATCCTCCTGCCTCAGCTTCTTGAGTAGCTGGAACACAGGTGT
GTGCTACCGTGCCTGGCACTTTTTTGCCTTCTTAATGGAGATATTCAAGTTTCTTTTTTTTCATTTAAACAAAGAA
AAAAATGTATCTACTCTACCTTCCCTCTGCTCTCCTCCCTCCCTATCCTACTTGCCCATATGAGCACGGCTCCC
CATGGCCACATACTCCTGCAAAGCTTTTATGCTGCTTCGCTTTTCTCTAAACAGATCTGATATTGCTGCTCCTGT
GGTTTTCTCAAAATTAAC TTTGCCGTGGTTTTTAAAAAGGAATCAAAATGCATTGTTGCATTAAAGCTTTTTCAAT
AAAGGAAAATTACGGAAGGAAAATAGGCAACACCAGCAAATTATATGTGGACAGGTTCTAAACTCTATATATACA
TATATATATATATATCTATATATCTATATACGTAATCATCTAGTTCTGTCACTTACTGAAAGGAATAACACTTC
TAAAGATCACCATTCTGAGAAGTTCTTGGAATCTTTATGTCTAAGTGATTGTATTAGATCAGCAATAATGACT
ATGTAATCTCAAAAAACAAATAAAATATTCTTAACATGG

WO 2004/030615

PCT/US2003/028547

2622/6881
FIGURE 2410

MSVQVVSAAAAKVPEVELKDLSPSEAESQLGLSTA AVGAMAPPAGGGDPEAPAPAAERPPVPGPGSGPAAALSP
AAGKVPQASAMKRSDPHHQHQRHRDGG EALVSPDGTVTEAPRTVKKQIQFADQKQEFNKRPTKIGRRSLRSISQ
SSTD SYSSAASYTDSDDETSPRDKQQKNSKGSSDFCVKNIKQAEFGRREIEIAEQEMPALMALRKRAQGEKPLA
GAKIVGCTHITAQTAVLMETLGALGAQCRWAACNIYSTLNEVAAALAESGFPVFAWKGESEDDFWWCIDRCVNVE
GWQPNMILDDGGDLTHWIYKKYPNMFKKIKGIVEESVTGVHRLYQLSKAGKLCVPAMNVNDSVTQKFDNLYCCR
ESILDGLKRITDMMFGGKQVVVCGYGEVGKGCCAALKAMGSIVYVTEIDPICALQACMDGFRLVKLNEVIRQVDI
VITCTGNKNVVTREHLDRMKNSCIVCNMGHSNTEIDVASLRTPELTWERVRSQVDHVIWPDGKRIVLLAEGRLLN
LSCSTVPTFVLSITATTQALALIELYNAPEGRYKQDVYLLPKKMDEYVASLHLPTFDAHLTELTDEQAKYLGLNK
NGPFKPNYYRY

WO 2004/030615

PCT/US2003/028547

2623/6881
FIGURE 2411

AGTTCCTGGTCCAGAACTTTACACAGAAAAGGTGCTCAAAGGATATTTGTTTAATGAATGTGGTATGCTGACATT
TAAACAGGACAAAACCTTGTAGAACCTTCATGGAGGAACACGGAGTGACCCAAACCGAACATATGGCTACCATAGAA
GCACATGCAGTGGCCCAGCAAGTGCAGCAGGTCCATGTGGCTACTTACACCGAGCATAGTATGCTGAGTGCTGAT
GAAGACTCGCCTTCTTCTCCCGAGGACACCTCTTACGATGACTCAGATATACTCAACTCCACAGCAGCTGATGAG
GTGACAGCTCATCTGGCAGCTGCAGGTCCGTGTGGGAATGGCCGCTGCTGCTGCTGTGGCAACAGGAAAGAAACGG
AAACGGCCTCATGTATTTGAGTCTAATCCATCTATCCGGAAGAGGCAACAAACACGTTTGCTTCGGAAACTTCGA
GCCACGTTAGATGAATATACTACTCGTGTGGGACAGCAAGCTATTGTCTCTGTATCTCACCCCTCCAAACCTAAC
CCTGTCTTTAAAGTGTTTGGTGCAGCACCTTTGGAGAATGTGGTGCCTAAGTACAAGAGCATGATCCTGGAAGAC
CTGGAGTCTGCTCTGGCAGAACACGCCCTGCGCCACAGGAGGTAACTCAGAACTGCCGCTCTCACCATCGAC
GGAATTCAGTCTCTGTGGACAAAATGACCCAGGCCAGCTTCGGGCATTTATCCAGAGATGCTCAAGTACTCT
ACAGGTTCGGGGAAAACAGGCTGGGGGAAAGAAAGCTGCAAGCCCCATCTGGTGGCCTGAAGATATCCCTGGGCA
AATGTCCGGAGTGATGTCCGCACAGAAGAGCAAAAGCAGAGGGTTTCATGGACCCAGGCACTACGGACCATAGTT
AAAACTGTTATAAACAGCATGGGCGGGAAGACCTTTTGATGCTTTGAAGATCAGCAACGCAACACAGGCC
ACAGCCACACATAGTATAGCTCATCTTGTACCATCACAGACTGTAGTCCAGACTTTTAGTAACCTGATGGCACT
GTCTCACTTATCCAGGTTGGTACGGGGGCAACAGTAGCCACATTGGCTGATGCTTCAGAATTGCCAACACGGTC
ACCGTTGCCCAAGTGAATTATCTGCGGTGGCTGATGGAGAGGTGGAACAAAATTGGGCCACGTTACAGGGAGGT
GAGATGACCATCCAGACGACGCAAGCATCAGAGGCCACCCAGGCGGTGGCATCGTTGGCAGAGGCCGAGTGGCA
GCTTCTCAGGAGATGCAGCAGGGAGCTACAGTCACTATGGCGCTTAACAGCGAAGCTGCCGCCCATGCTGTGCGC
ACCTTGGCTGAGGCCACCTTACAAGGTGGGGGACAGATCGTCTTGTCTGGGGAAACCGCAGCAGCCGTGGGAGCA
CTTACTGGAGTCCAAGATGCTAATGGCCTCTTTATGGCAGATCGTGCAGGTGCGAAGTGGAATCCTGACTGACAAA
GCCACAGGCCCTGGTCCAGATCCCTGTGAGCATGTACCAGACTGTGGTGACCAGCCTCGCCCAGGGCAACGGACCA
GTGCAGGTGGCCATGGCCCCGTGACCACCAGGATATCAGACAGCGCAGTCACCATGGACGGCCAAGCTGTGGAG
GTGGTGACATTGGAACAGTGACATACAGCCATATTATGGCATCGTTTTCTAGTCTACTTCAAAATTTTTTACACG
TTTGACAGAGGTGCAATCAAATGGAATTAAGTCTCTCGACTTTGGAAGGAAAGTTTTGTAAACCTTTTTTTTTTA
AAAGGAAGAAAGCGGATTTTGGAATTGCATTTTTTAAAGCACCCTCTTGATTTTCTGGGATTGGTGAAGAACT
GCATTGTCAATTTCACTGTCCCAAAAAGCCAAATTGTGGCAGGACTTCTTCTGCGGAAATGTGTGTGTATACT
TATGTGTGTGTATGTGTGAGTGTGAATATATGTATATGTGTACATATGGACATACACATTTACATATATATAAAG
TATATATATACATATATATATATATATATGTATGAAACCCGCATGGAATTATCTGTATGAAATCAAGGTGCGCTG
TGGAACAATAATTCACCCAGTTTAGTGGGTGGTAGGGTACGTGGCCAGACACAGTCACCCAGTTTTTTGTTTATA
CCAGGGTCATGCGTTGAGCTACTGACAACTCAGGCGGAGGTGACCATGCCCTTACCAAAGCTGCCCTCCAGTG
GCCACACAGAACTCTCCCTGCTGGACTCACCTGAGGAAAGAGGCTCCAGCATGGGGTGGGTGAGAGATGTGCTTG
CAAGGTCCAGGGACTGCGTGGTCTGCCAGCTGAGATGCTCCTCGGGCTGGCCAGGTGCTGACCTTGCCACAGGC
AGATGAATGTCTTGAAAGCTCCCGGGCTCAGCCTCCCATCTCCTCTCCTTCCAGGAATCCTTGATCTCATGAC
TATTAATAATGTTGCTCTGGTTTTTAAGGTGAGTCTGAAATGCTCGTATATATGAACTGAAGGTAACCGAAGTATT
AGGGGTTTGAGGAGTGCGTGCGTGTAAAGTGTGCTTGTGTGTGTGCGTGATGGTGGGGGAGAGGATGGGAAGGGG
GCGGGGGCAGTGGAAGGGAAAGGAAGGAAAGAAAATCGTCTAGACCAGGATACACCCGTGGGAGCAATTTTTCT
CTACTGTCTGTAGCTTCACAGAGGAGGCGCTGGAATGAACAAGAAGAGACATCTGGTCTGTGGCCACAGCACCT
GAACGCCCCCTGATCTTGTGTGATCTTGGAAAGCTAAGCTTGGTTGGGCCCGGTGAGTACGCGGAAGGGAAGAAGG
ACACCTGGCCATAGAAAAACAGCTGAGGGTGTGTTGCTGTGTTCTGGATCAGGCCCTGCTTCAGAAGGGACTCCTG
GAGGCCCATGTTCTTGATGCAACCTCGTGGCCAGGCCGGGAGCAGCTTGCTCCTCAGAGGTGTTGACTATCT
GGGTGTTCTTGTTAAC

WO 2004/030615

PCT/US2003/028547

2624/6881
FIGURE 2412

MEEHGVQTTEHMATIEAHAVAQQVQVHVATYTEHSMLSADSDSPSSPEDTSYDDSDILNSTAADEVTAHLAAAG
PVGMAAAAVATGKKRKRPHVFESNPSIRKRQQTRLLRKLRLATLDEYTTRVGQQAIVLCISPSKPNPVFKVFGAA
PLENVVRKYKSMILEDLESALAEHAPAPQEVNSELPPLTIDGIPVSVDKMTQAQLRAFIPEMLKYSTGRGKPGWG
KESCKPIWWPEDIPWANVRSDVRTEEQQRVSWTQALRTIVKNCKYQKHGRELLYAFEDQQTQTQATATHSIAHL
VPSQTVVQTFSPNDGTVSLIQVGTGATVATLADASELPTTVTVQVNYSAVADGEVEQNWATLQGGEMTIQTTQA
SEATQAVASLAEAAVAASQEMQQGATVTMALNSEAAAHAVATLAEATLQGGGQIVLSGETAAAVGALTGVQDANG
LVQIPVSMYQTVVTSLAQNGPQVQVAMAPVTTTRISDSAVTMDGQAVEVVTLEQ

WO 2004/030615

PCT/US2003/028547

2625/6881
FIGURE 2413

GCCTCAAGAGGCGGATATTAACCTCCCAGGACGGAAGTTCCGGAGCCTTCAAACCTCTCGGGGAAGCAACTCGGCA
GCGGACCAAGATGGCGGCGCCCTGTGAGGGACAAGCGTTTGCCGTAGGGGTTGAAAAGAAATGGGGTGCAGTAGT
TCGCTCCCCAGAAGGGACCCCCAGAAAATCCGGCAGCTGATAGATGAGGGGATTGCCCCGAAGAGGGAGGCGT
GGACGCGAAGGACACGTCTGCCACATCCCAGTCAGTTAATGGATCACCCCAAGCGGAACAACCTTCATTGGAATC
TACAAGCAAAGAAGCCTTCTTTAGCAGAGTGGAACATTTTCTTCTTTGAAATGGGCAGGTAAGCCCTTTGAGCT
GTCTCCACTCGTCTGTGCAAAATATGGCTGGGTACAGTGGAATGTGATATGCTCAAGTGCTCTAGCTGTCAAGC
TTTTCTCTGTGCCAGTTTACAACCAGCTTTTGACTTTGACAGATATAAGCAACGATGTGCTGAGCTGAAGAAAGC
CTTGTGTACTGCCCATGAGAAGTTCTGTTTCTGGCCAGACAGCCCATCCCCAGACCGATTGGGATGTTGCCCT
GGATGAGCCTGCTATTCTTGTAGTGAATTCCTAGATCGTTTTCAAAGCCTTTGTCACTTGGACCTCCAGCTTCC
TTCCCTAAGGCCGGAGGACTTGAAAATATGTGCTTGACAGAAGACAAGATCAGTCTTCTCTACACTTGCTTGA
AGATGAACCTTGATCACCGAAGTGTGAGAGAAAACTACAATCAAATTAGGCTCAGACATCCAAGTCCACGTCAC
TGCTGTATTCTCTCTGTGTGTGGCTGGGCGTGTAGTTCCTCTTTGGAATCCATGCAGCTCTCCCTGATAACATG
TTCGCAATGTATGAGGAAGGTGGGCTCTGGGGCTTCCAGCAGATTGAATCGTCCATGACTGACCTGGATGCATC
CTTTGGCCTGACCAGCTCCCCAATCCCAGGCCTTGAGGGGCGACCAGAGCGCTTACCTCTGGTGCCTGAATCTCC
TCGGAGGATGATGACCCGGAGCCAGGATGCCACTTTCTCCCCAGGCTCAGAGCAGGCTGAAAAGAGCCCTGGTCC
CATTGTCTCTCGAAGCTCGGAGCTGGGACTCTTCCAGTCCTGTTGACCGTCTGAGCCAGAGGCTGCTAGCCCCAC
CACCAGAAGCTCGCCAGTGACCCGAAGCATGGGAACAGGAGACACCCCTGGCCTGGAGGTACCATCTAGCCCTCT
GCGGAAAGCCAAGCGAGCTCGCCTCTGCTCCTCCAGCAGTTCGGACACATCTTCCCGAAGCTTCTTTGATCCCAC
CTCTCAGCATAGAGACTGGTGCCCTTGGGTGAATATCACACTTGGCAAAGAAAGCAGGGAGAATGGTGGAAGTGA
ACCAGATGCCAGCGCCCCAGCAGAGCCAGGCTGGAAAGCAGTGCTGACCATCCTCTTGGCGCACAAACAGTCTAG
CCAGCCAGCTGAAACGGACTCCATGAGTCTCTCTGAGAAATCAAGGAAAGTATTCCGAATATTTCCGCAGTGGGA
ATCTCTGTGCTCATGCTGAAGATACTCAGCGCCTTCCCTGGAGATAGCTGGAATGAGAGTGACTTTTTGAAAAAT
TAAGGCTGAGTTCCTTTCCGTGAGCTGACACTAAGTTTTTCTGTTCTGGGTTAATCATAAGGAGCCCCCTGCCA
TAGCAAAGGCAGTGAGTGTCAACTATCTGCATCTGGCTGAGAGAGACCCGTTTCTTTTCAGGGATGTGGACAGGG
TAAGGGCAGCAAGCATGGTCTGTAAAGGAGTGTTGGGATTAACAGACTAGAAGGAAGACTAAGGACCTGACCAC
CCATTTGAGCATCTTCAATGTGGAGCAGTGTCTGAGGACTCTTCTATCCTAGGACTATGACAGTGTGTATTAAT
AAAATATTTGCTAAGATTCTCA

WO 2004/030615

PCT/US2003/028547

2626/6881
FIGURE 2414

GGCGCTGACGCCTGGCAGGGAGAAGGCGGCAGCACATGCTGGGCTCGGGGGCGATGGGCTTGTGCGCGGACCTGG
CGACGCTCTAGCCCCGAGCCGCGTATTTCGTGGCCGGGTCTCCCTGGGAACAGGGTGAAGGCCGAGAACCTCTGG
CCTCAGGAAGCGCATGCGCAACCGGTTCTCCGAAACATGGAGTCTGTAGGCAAGGTCTTACCTGAATCAGGATG

AGGGAGTGGTGGGTCCAGGTGGGGCTGCTGGCCGTGCCCTGCTTGCTGCGTACCTGCACATCCCACCCCTCAG
CTCTCCCTGCCCTTCACTCATGGAAGTCTTCAGGCAAGTTTTCTACTTACAAGGGACTGCGTATCTTCTACCAA
GACTCTGTGGGTGTGGTTGGAAGTCCAGAGATAGTTGTGCTTTTACACGGTTTTTCCAACATCCAGCTACGACTGG
TACAAGATTTGGGAAGGTCTGACCTTGAGGTTTCATCGGGTGATTGCCCTTGATTTCCTAGGCTTTGGCTTCAGT
GACAAACCGAGACCACATCACTATTCCATATTTGAGCAGGCCAGCATCGTGGAAAGCGCTTTTGCGGCATCTGGGG
CTCCAGAACCGCAGGATCAACCTTCTTTCTCATGACTATGGAGATATTGTTGCTCAGGAGCTTCTCTACAGGTAC
AAGCAGAATCGATCTGGTCGGCTTACCATAAAGAGTCTCTGCTGTCAAATGGAGGTATCTTCTCTGAGACTCAC
CGTCCACTCCTTCTCCAAAAGCTACTCAAAGATGGAGGTGTGCTGTCAACCATCCTCACACGACTGATGAACTTC
TTTGTATTCTCTCGAGGTCTCACCCAGTCTTTGGGCCGTATACTCGGCCCTCTGAGAGTGAGCTGTGGGACATG
TGGGCAGGGATCCGCAACAATGACGGGAACCTTAGTCATTGACAGTCTCTTACAGTACATCAATCAGAGGAAGAAG
TTCAGAAGGCGCTGGGTGGGAGCTCTTGCCCTGTAACTATCCCCATTCATTTTATCTATGGGCCATTGGATCCT
GTAAATCCCTATCCAGAGTTTTTGGAGCTGTACAGGAAAACGCTGCCGCGGTCCACAGTGTCGATTCTGGATGAC
CACATTAGCCACTATCCACAGCTAGAGGATCCCATGGGCTTCTTGAATGCATATATGGGCTTCATCAACTCCTTC
TGAGCTGGAAAGAGTAGCTTCCCTGTATTACCTCCCTACTCCCTTATGTGTTGTGTATTCCACTTAGGAAGAAA
TGCCCAAAGAGGTCTGGCCATCAAACATAATCTCTCACAAAGTCCACTTTACTCAAATTGGTGAACAGTGTA
TAGGAAGAAGCCAGCAGGAGCTCTGACTAAGGTTGACATAATAGTCCACCTCCCATTACTTTGATATCTGATCAA
ATGTATAGACTTGGCTTTGTTTTTTGTGCTATTAGGAAATCTGTATGAGCATTACTATTCACTGATGCAGAAAGA
CGTCTTTTTGCATAAAAGACTTTTTTTTAACTTTGGACTTCTCTGAAATATTTAGAAGTGCTAATTTCTGGCC
CACCCCAACAGGAATCTATAGTAAGGAGGAGGAGAAGGGGGGCTCCTTCCCTCTCCTCGAATGACGTTATGGG
CACATGCCCTTTTAAAGTTCTTTAAGCAACACAGAGCTGAGTCCTCTTTGTCATACCTTTGGATTTAGTGTTTCA
TCAGCTGTTTTTAGTTATAAACATTTTGTAAAAATAGATATTGGTTTAAATGATACAGTATTTTAGGTATGATTT
AAGACTATGATTTACCTATACATTATATATTTTATAAAGATACTAAACCAGCATACCTTACTCTGCCAGAGT
AGTGAAGCTAATTAAACACATTTGGTTTCTGAATAAATTGAACTAAATCCAACTATTTCTAAATCACAGGAC
ATTAAGGACCAATAGCATCTGTGCCAGAGATGTACTGTTATTAGCTGGGAAGACCAATTCTAACAGCAAATAACA
GTCTGAGACTCCTCATACCTCAGTGGTTAGAAGCATGTCTCTCTTGAGCTACAGTAGAGGGGAAGGGATTGTGT
GTAGTCAAGTCACCATGCTGAATGTACACTGATTCCTTTATGATGACTGCTTAACTCCCCACTGCCTGTCCCAGA
GAGGCTTTCCAATGTAGCTCAGTAATTCCTGTTACTTTACAGACAGGAAAGTTCCAGAACTTTAAGAACAACT
CTGAAAGACCTATGAGCAAATGGTGCTGAATACTTTTTTTTAAAGCCACATTTTATTGTCTTAGTCAAAGCAGG
ATTATTAAGTGATTATTTAAAAATCGTTTTTTTAAATTAGCAACTTCAAGTATAACAACCTTTGAACTGGAATAA
GTGTTTATTTTCTATTAATAAAAAATGAATTGTGAC

WO 2004/030615

PCT/US2003/028547

2627/6881
FIGURE 2415

MREWWVQVGLLAVPLLAAYLHIPPQLSPALHSWKSSGKFFTYKGLRIFYQDSVGVVGSPEIVVLLHGFP TSSYD
WYKIWEGLTLRFHRVIALDFLGFGFSDKPRPHHYSIFEQASIVEALLRHLGLQNRINLLSHDYGDIVAQELLYR
YKQNRSGRLTIKSLCLSNGGIFPETHRPLLLQKLLKDGGVLSPILRLMNEFFVFSRGLTPVFGPYTRPSESELWD
MWAGIRNNDGNLVIDSLLQYINQRKKFRRRWVGALASVTIPIHFYIYGPLDPVNPYPEFLELYRKTLP RSTVSILD
DHISHYPQLEDPMGFLNAYMGFINSF

WO 2004/030615

PCT/US2003/028547

2628/6881
FIGURE 2416

TGCTTGTACCTAGAAGGGAGACGAGGAAACACACATGTAGCTGAGCAAACCTTAAACCAGTGCACCGCTGAAAACG
AGAGAAAAAGGATACAAACAGTCCAGAAACAATGTACTTTCCTAGCATCATAAGCTGAAGTCTGAAGCTCCACTG
ACCTGTAGAGAAGCTCCTGAGCAACAATATCTCCATAGTCATGAGAAAGAAGGTTGATCCTGCGGTTCTGGAGCC
CCAGATGCCGCAAAGCGCTTCCACGATGCTGGCCTGCTCAAATATGGAATAGTGATGTGGTCTCTGAGGAAAGG
AAAGCCACATACACAGGATGAAGTCATGAGGACAGCTCTCTCTGCCAGCCTGACCCCTCATAGTCTGCGTCTGCC
CCCACACCCCATCACCAGCCCCACATAGGTGCTGCTTACCGGTTTGTCACTGAAGCCAAAGCCTAAGAAATCAAG
GGCAATCACCCGATGAAACCTCAAGGTCAGACCTTCCCAAATCTACAAGAAAGAAACGATGATTTGGGCTTTCTG
CTCCTGCCCCCTCCCTTTCACCAGACCTACAGTTGCACAGGAGCTTACGCCCTATCTTGGCTTAACAGACTTCCAT
AAAGAGAAAACGCCATGAAACTACCACAGGTCCCACAGATGATCCTTGGAAAATGCTTTATTCCTGGTAATTA
ATCCCTGTTGAGGGAGGGTAACCTGGCAGTGATCCCTTCCAGAGTGCCAAGGAGTTGTTTATTCCTTCAGTAAA
TAAGGAACAGTTCAACATTTAATGTTTTTTTAAAAGCAATTCAAATGTGCAAGAGCCTTCTGGTGCTGACAACAA
AATCCTTGAGGTTTTTTTAAATTTTTTATTAATAAAAAAATTTTTTTTTTGAGACAGACTCTCGCTCTGTACCTAGGC
TGAAGTGCAGTGCGTGAATCTCAGCTCACTGCAACCTCTGCCCTCCCGGTTCAAGCGATTCTCCTGCCTCAGCCT
CCCAAGTAGCTGGGATTACAGGCTTGTGCCACCATGCCTGGCCAAATTTTATACTTTTAGTAGAGATGGGGTTTT
GCCATGTTGGCCTGGCTGGTCTCAAACCTCTGACCTCAGGTCACTCTCCACCTCAGCCTCCCAAAGTGCTAGGA
TTTGAGCCCCCGCGCCCGGCGGAGATTTTTTAAGACATAGTAGGACGTAGAAGTCTGACTTCATTACCTTGTACC
AGTCGTAGCTGGATGTTGGAAAACCGTGTAAGACACAACCTATCTCTGGACTTCCAACCACACCCACAGAGTCTA
GGAAGAAGGAAAGTACAATCAATTATGCCAAATCCCTATAAAAAATAACCTCGAAGATGTTAAAAATCTAAGTAATC
TGATACAAAGAACAAGCAACTGTGACCAAATTGACATTAAAAATGACACAATTATTTGTAAGTAAAGCTTAACCT
GCGTTAGGTGAGAACAGGCCTTTTCTCCTTTCAATCTGTATATTAACCAATTGTAAGTAAATCATGCTATGTGAAA
TACTTGAAGGCACCTTGTTTACTTTCACCTAGGTGTTTTTAAACAGCATCTCCCCATTTCTCCTTTTGTCTGTGTA
ATATGCAAATTTTTTCAGTGAAAAGTAAATTTTCAGTTAAAGCATATGATCACAACACATAAACTACAAATTCT
TTGTACTTTATCATGAATGGCCTCACAGAAATCTCTAAGATACAGCAACTATTCCCAAGGAACACCTTTAGCTT
ATGCTGTTTGCTCAGCACTTTTTATTTCAGCAGGAGACCCAATCTAACATCAAAAACATAATAAACTATTACAAA
ATCCTGTCAACTATAAAAAGGGCTTAATCAACATAAACATGAACCTTTTTTAATGCATATGACAATATGGAAGCAT
TCAGCATCATCTAAATTAGGTAAACATTTAGACAATATTAACCTTGCTAATAGTATGGGATTAGAACAGGTATAT
TCATATACTGCCAGTGACATGAAAATTTGGTAATAAGGTTTTCAAAAATAATTTAGAAGCAGTTAAAAATTGTAT
ATACTTTAGCCTAAGAGTTTTGTTCTTGAGAACTGTGCAAAATAAAATCATTCCATTTATACAAGTAGTATAGTT
TGAAAATGTAAGGAAAAAATAAACTGTATGGACATGAAGCTTTTACTTCAACATTAGTTTTCTAAAACAGTAAAA
CTGGAAGTAACCCAAGCCAACATAATAAAAAATTGTATACTTACTTAATTGAATATAGCAAATGAGAGGAGGTCAG
GAGCAATAATGAAAAACGGTTTATGACAAACATTTTCGTTATTGCTCTTGACCCCGCTCAAAACAAATCATT
CCAATCTGTTTCTCAGTTTCTTCACCTATAAAATGAGGTTAATGGCACCTATCTCCAAATGCTGTTGTAAAGATT
AAACAATGAAGGCTGAAAACATAACTCAGTGCCTGGCATATGGTAATTACTTGATAAGTAGTGGTCATAATAATC
ATCATCACTAGCAAATTAATTTATATAATGGTATCAAGACTTAAATCACAGTTACACTACAAATAATCTACAGAA
AAAATGAAATCAGGGATGGTAAGGAGAGAGAACCAATGGTGGTTATATCTATTAATATTTTATATATTACCTGAC
AGGTTGCTC

WO 2004/030615

PCT/US2003/028547

2629/6881
FIGURE 2417

TTTCCAGCCCCGGCCCCGGACCCTGCAGCTGCAGAGATGTTGATGCCTAAGAAGAAGCTGGATTGCCATTTATGAA
CTCCTTTTTTAAGGAGGGAGTCATGGTGGCCAAGAAGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAAG
AATGTGCCCAACCTTCATGTATGAAGGCCATGCAGTCTCTCAAGTGCCGAGGCTACGTGAAAGAACACTTTGCC
TGGAGACATTTCTACTGGTACCTTACCAATGAGTGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCGGAG
ATTGTGCCTGCCACCCTACGCCGTAGCCGTCCAGAGACTGGCAGGCCTCGGCCTAAAGGTCTGTATATGAGGAGT
GCTGTGCTACCTGGTGGCGACAAGAAAGCCGAGGCTGGGGCTGGGTGAGCAACCGAATTCTAGTTTAGAGGCGGA
TTTGGTTGTGGACGTGGTCAGCCACCTCAGTAAAGCTGGAGAGGATTCTTTTGATTGAATAAATTTACAGCCAA
AAAA

WO 2004/030615

PCT/US2003/028547

2630/6881
FIGURE 2418

CTCTTTCTGCTGCTCCCCAGCTCTCGGATACAGCCGACACCATGGGTTTCGGAGACCTGAAAAAGCCCCACCGGCC
TCCAGGTGCTCAACGATTACCTGGCGGACAAGAGCTACATCAAGGGGTATGGTGCCATCACAAGCAGATGTGGCA
GTATTTGAAGCCGTGTCCGGCCCCACCACCTGCCGACTTGTGTCATGCCCTACGTTGGTATAATCACATCAAGTCT
TACGAAAAGGAAAAGGCCGGCCTGCCAGGAGTGAAGAAAGCTTTGAGCAAGTATGGTCCTGCCGATGTGGAAGAC
ACTACAGGAAGTGGAGCTACAGACAGTAAAGATGATGATGACATTGATCTCTTTGGATCCGATTATGAGGAGGAA
AGTGAAGAAGCAAAAGAGGCTAAGGGAAGAACATCTTGACACAATATGAATCAAAGAAAGCCAATGATGAGACAGAT
ATGGCGAAATTAGAGGAGTGTGTCAGAAGCATTCAAGCAGACGGCTTAGTCTGGGGCTCATCTAAACTAGTTCCA
GTGGGATACGGAATTAAGAACTTCAAATACAGTGTGTAGTTGAAGATGATAAAGTTGGAACAGATATGCTGGAG
GAGCAGATCACTGCTTTTGAGGACTATGTGCAGTCCATGGATGTGGCTGCTTTCAACAAGATCTTAAAAAATCCATC
CTGGATCATG

WO 2004/030615

PCT/US2003/028547

2631/6881
FIGURE 2419

MVPSQADVAVFEAVSGPPPADLCHALRWYNHIKSYEKEAGLPGVKKALSKYGPADVEDTTGSGATDSKDDDDID
LFGSDYEEEESEEAKRLREEHLAQYESKKANDETDMAKLEECVRSIQADGLVWGSSKLVPVGYGIKKLQIQCVVED
DKVGTDMLEEQITAFEDYVQSMDVAAFNKI

WO 2004/030615

PCT/US2003/028547

2632/6881
FIGURE 2420

CTTTCTTTGCGGAATCACCATGGCGGCTGGGACCCTGTACACGTATCCTGAAAACCTGGAGGGCCTTCAAGGCTCT
CATCGCTGCTCAGTACAGCGGGCTCAGATCCGCGTGCTCTCCGCACCACCCACTTCCATTTTGGCCAAACCAA
CCGCACCTCTGAATTTCTTCGCAAATTTCTTGCCGGCAAGGTCCCAGCATTGAGGGTGATGATGGATTCTGTGT
GTTTGAGAGCAACGCCATTGCCTACTATGTGAGCAATGAGGAGCTGCGGGGAAGTACTCCAGAGGCAGCAGCCCA
GGTGGTGCASTGGGTGAGCTTTGCTGATTCCGATATAGTGCCCCCAGCCAGTACCTGGGTGTTCCCCACCTTGGG
CATCATGCACCACAACAAACAGGCCACTGAGAATGCAAAGGAGGAAGTGAGGCGAATTCTGGGGCTGCTGGATGC
TTACTTGAAGACGAGGACTTTTCTGGTGGGCGAACGAGTGACATTGGCTGACATCACAGTTGTCTGCACCCCTGTT
GTGGCTCTATAAGCAGGTTCTAGAGCCTTCTTTCCGCCGGGCTTTCGCAATACCAACCGCTGGTTTCCTCACCTG
CATTAAACCAGCCCCAGTTCCGGGCTGTCTTGGGGGAACTGAAACTGTGTGAGAAGATGGCCCAGTTTGTATGCTAA
AAAGTTTGAGAGACCCAGCCTAAAAAGGACACACCACGGAAAGAGAAGGGTTACCGGAAGAGAAAGCAGAAGCC
CCAGGCTGAGCGGAAGGAGGAGAAAAAGGCGGCTGCCCTGCTCCTGAGGAGGAGATGGATGAATGTGAGCAGGC
GCTGGCTGCTGAGCCCAAGGCCAAGGACCCCTTCGCTCACCTGCCCAAGAGTACCTTTGTGTTGGATGAATTTAA
GCGCAAGTACTCCAATGAGGACACACTCTCTGTGGCACTGCCATATTTCTGGGAGCACTTTGATAAGGACGGCTG
GTCCCTGTGGTACTCAGAGTATCGCTTCCCTGAAGAACTCACTCAGACCTTCATGAGCTGCAATCTCATCACTGG
AATGTTCCAGCGACTGGACAAGCTGAGGAAGAATGCCTTCGCCAGTGTATCCTTTTGGAAACCAACAATAGCAG
CTCCATTTCTGGAGTCTGGGTCTTCCGAGGCCAGGAGCTTGCCTTTCCGCTGAGTCCAGATTGGCAGGTGGACTA
CGAGTCATACACATGGCGGAACTGGATCCTGGCAGAGAGGAGACCCAGACGCTGGTTCGAGAGTACTTTTCCTG
GGAGGGGGCCTTCCAGCATGTGGGCAAAGCCTTCAATCACGGCAAGATCTTCAAGTGAACATCTCTTGCCATCAC
CTAGCTGCCTGCACCTGCCCTTCAGGGAGATGGGGGTATTAAAGGAACTGAACATTG

WO 2004/030615

PCT/US2003/028547

2633/6881
FIGURE 2421

MAAGTLYTYPENWRAFKALIAAQYSGAQIRVLSAPPHFHFQGQTNRTSEFLRKFPAGKVPAPFEGDDGFCVFESNAI
AAYVSNEELRGSTPEAAAQVVQWVSFADSDIVPPASTWVFPTLGIMHHNKQATENAKEEVRRILGLLDAYLKTRT
FLVGERVTLADITVVCTLLWLYKQVLEPSFRRFRNTNRWFLTCINQPQFRAVLGELKLCEKMAQFDAKKFAETQ
PKKDTPRKEKGSREEKQKQQAERKEEKAAAPAPEEEMDECEQALAAEPKAKDPFAHLPKSTFVLDEFKRKYSNE
DTLSVALPYFWEHFDKDGWSLWYSEYRFPEELTQTFMCSNLTGMFQRLDKLRKNAFASVILFGTNNSSSISGVW
VFRGQELAFPLSPDWQVDYESYTWKLDPGREETQTLVREYFSWEGAFQHVKGAFNHGKIFK

WO 2004/030615

PCT/US2003/028547

2634/6881
FIGURE 2422

ATCACCATGGCGGCTGGGACCCTGTACACGTATCCTGAAAAC TGGAGGGCCTTCAAGGCTCTCATCGCTGCTCAG
TACAGCGGGGCTCAGATCCGCGTGCTCTCCGCACCACCCCACTTCCATTTGGCCAAACCAACCGCACCTCTGAA
TTTCTTCGCAAATTTCTGCGGCAAGGTCCCAGCATTTGAGGGTGATGATGGATTCTGTGTGTTTGAGAGCAAC
GCCATTGCCTACTATGTGAGCAATGAGGAGCTGCGGGGAAGTACTCCAGAGGCAGCAGCCCAGGTGGTGCAGTGG
GTGAGCTTTGCTGATTCCGATATAGTGCCCCCAGCCAGTACCTGGGTGTTAGCCCAAGGCCAAGGACCCCTTCGC
TCACCTGCCCCAAGAGTACCTTTGTGTTGGATGAATTTAAGCGCAAGTACTCCAATGAGGACACACTCTCTGTGGC
ACTGCCATATTTCTGGGAGCACTTTGATAAGGACGGCTGGTCCCTGTGGTACTCAGAGTATCGCTTCCCTGAAGA
ACTCACTCAGACCTTCATGAGCTGCAATCTCATCACTGGAATGTTCCAGCGACTGGACAAGCTGAGGAAGAATGC
CTTCGCCAGTGTATCCTTTT

WO 2004/030615

PCT/US2003/028547

2635/6881
FIGURE 2423

GAAGGCCGCACCGTACTGGGCGGGGGTCTGGGGAGCGCAGCAGCCATGGCAAGCCGTCTCCTGCTCAACAACGGC
GCCAAGATGCCCATCCTGGGGTTGGGTACCTGGAAGTCCCCTCCAGGGCAGGTGACTGAGGCCGTGAAGGTGGCC
ATTGACGTCGGGTACCGCCACATCGACTGTGCCCATGTGTACCAGAATGAGAATGAGGTGGGGGTGGCCATTGAG
GAGAAGCTCAGGGAGCAGGTGGTGAAGCGTGAGGAGCTCTTCATCGTCAGCAAGCTGTGGTGCACGTACCATGAG
AAGGGCCTGGTGAAAGGAGCCTGCCAGAAGACACTCAGCGACCTGAAGCTGGACTACCTGGACCTCTACCTTATT
CACTGGCCGACTGGCTTTAAGCCTGGGAAGGAATTTTTCCCATTTGGATGAGTCGGGCAATGTGGTTCCTCAGTGAC
ACCAACATTCTGGACACGTGGGCGGCCATGGAAGAGCTGGTGGATGAAGGGCTGGTGAAAGCTATTGGCATCTCC
AACTTCAACCATCTCCAGGTGGAGATGATCTTAAACAAACCTGGCTTGAAGTATAAGCCTGCAGTTAACCAGATT
GAGTGCCACCCATATCTCACTCAGGAGAAGTTAATCCAGTACTGCCAGTCCAAAGGCATCGTGGTGACCGCTAC
AGCCCCCTCGGCTCTCCTGACAGGCCCTGGGCCAAGCCGAGGACCCTTCTCTCCTGGAGGATCCCAGGATCAAG
GCGATCGCAGCCAAGCACATAAACTACAGCCCAGGTCTGATCCGGTTCCTCATGCAGAGGAACCTGGTGGTG
ATCCCCAAGTCTGTGACACCAGAACGCATTGCTGAGAACTTTAAGGTCTTTGACTTTGAACTGAGCAGCCAGGAT
ATGACCACCTTACTCAGCTACAACAGGAACCTGGAGGGTCTGTGCCTTGTGAGCTGTACCTCCCACAAGGATTAC
CCCTTCCATGAAGAGTTTTGAAGCTGTGGTTGCCTGCTCGTCCCCAAGTGACCTATACCTGTGTTTCTTGCCCTCA
TTTTTTTCCTTGCAAATGTAGTATGGCCTGTGTCACTCAGCAGTGGGACAGCAACCTGTAGAGTGGCCAGCGAGG
GCGTGTCTAGCTTGATGTTGGATCTCAAGAGCCCTGTGAGTAGAGTAGAAGTCTCTCCAGTTTGCTTTGCCCTT
CTTTCTACCCTGCTGGGGAAAGTACAACCTGAATACCCTTTTCTGACCAAAGAGAAGCAAAATCTACCAGGTCAA
AATAGTGCCACTAACGGTTGAGTTTTGACTGCTTGGAACCTGGAATCCTTTCAGCAAGACTTCTCTTGCCCTCAAA
TAAAAAGTGCTTTTTGTG

WO 2004/030615

PCT/US2003/028547

2636/6881
FIGURE 2424

MASRLLLNNGAKMPIILGLGTWKSPPGQVTEAVKVAIDVGYRHIDCAHVYQNEVEVGVAIQEKLREQVVKREELFI
VSKLWCTYHEKGLVKGACQKTLSDLKLDYLDLYLIHWPTGFKPGKEFFPLDESGNVVPSDTNILD TWAAMEELVD
EGLVKAIGISNFNHLQVEMILNKPGLKYKPAVNQIECHPYLTQEKL IQYCQSKGIVVTAYSPLGSPDRPWAKPED
PSLLEDPRIKAIAAKHNKTTAQVLIRFPMQRNLVVIPKSVTPERIAENFKVDFELSSQDMTLLSYNRNWRVCA
LLSCTSHKDYPFHEEF

WO 2004/030615

PCT/US2003/028547

2637/6881
FIGURE 2425

GGCACGAGGCCTGAGCTCAGGAGTTTGTGAGACCAGCCTGTCTCTACTAACAATATAAAAAATTAGCTGGGAGTCACG
GTGGGCGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGAACCCAGGAGACAGAGGTTGTA
GTGAGCTGAGATCGCACCCTGCACTCTAGCCTTGGCAACAGTGCAAGACTGTCTCAAAAACAGCAACAGAGAGC
AGGACGTGAGACTTCTACCTGCTCACTCAGAATCATTCTGCACCAACCAATGGCCACGTTTGTGGAGCTCAGTAC
CAAAGCCAAGATGCCATTGTGGGCCTGGGCCTTGGAACTCTCCTCTTGGCAAAGTGAAAGAAGCAGTGAAGGT
GGCCATTGATGCAGGATATCGGCACATTGACTGTGCCTATGTCTATCAGAATGAACATGAAGTGGGGGAAGCCAT
CCAAGAGAAGATCCAAGAGAAGGCTGTGAAGCGGGAGGACCTGTTTCATCGTCAGCAAGTTGTGGCCCCACTTTCTT
TGAGAGACCCCTTGTGAGGAAAGCCTTTGAGAAGACCCTCAAGGACCTGAAGCTGAGCTATCTGGACGTCTATCT
TATTCAGTGGCCACAGGGATTCAAGTCTGGGGATGACCTTTTCCCCAAAGATGATAAAGGTAATGCCATCGGTGG
AAAAGCAACGTTCTTGGATGCCTGGGAGGCCATGGAGGAGCTGGTGGATGAGGGGCTGGTGAAAGCCCTTGGGGT
CTCCAATTTTACGCCACTTCCAGATCGAGAAGCTCTTGAACAAACCTGGACTGAAATATAAACAGTGACTAACCA
GGTTGAGTGTCAACCATACCTCACACAGGAGAACTGATCCAGTACTGCCACTCCAAGGGCATCACCGTTACGGC
CTACAGCCCCCTGGGCTCTCCGGATAGACCTTGGGCCAAGCCAGAAGACCCTTCCCTGCTGGAGGATCCCAAGAT
TAAGGAGATTGCTGCAAAGCACAAAAAACCGCAGCCAGGTTCTGATCCGTTTCCATATCCAGAGGAATGTGAT
TGTCATCCCCAAGTCTGTGACACCAGCACGCATTGTTGAGAACATTCAGGTCTTTGACTTTAAATTGAGTGATGA
GGAGATGGCAACCATACTCAGCTTCAACAGAACTGGAGGGCCTGTAACGTGTTGCAATCCTCTCATTGGAAGA
CTATCCCTTCGATGCAGAATATTGAGGTTGAATCTCCTGGTGAGATTATACAGGAGATTCTCTTTCTTCGCTGAA
GTGTGACTACCTCCACTCATGTCCATTTTAGCCAAGCTTATTTAAGATCACAGTGAACCTTAGTCCTGTTATAGA
CGAGAATCGAGGTGCTGTTTTAGACATTTATTTCTGTATGTTCAACTAGGATCAGAATATCACAGAAAAGCATGG
CTTGAATAAGGAAATGACAATTTTTTCCACTTATCTGATCAGAACAAATGTTTATTAAGCATCAGAACTCTGCC
AACACTGAGGATGTAAAGATCAATAAAAAAATAATAATCATAAAAA

WO 2004/030615

PCT/US2003/028547

2638/6881
FIGURE 2426

MATFVELSTKAKMPIVGLGTWKSPLGKVKEAVKVAIDAGYRHIDCAYVYQNEHEVGEAIQEKIQEKAVKREDLFI
VSKLWPTFFERPLVRKAFETLKDLSYLDVYLIHWPQGFKSGDDLFPKDDKGNAIGGKATFLDAWEAMEELVD
EGLVKALGVSNFSHFQIEKLLNKPGLKYKPVNTQVECHPYLTQEKLQYCHSKGITVTAYSPLGSPDRPWAKPED
PSLLEDPKIKEIAAKHKKTAQVLIRFHIQRNVIVIPKSVTPARIVENIQVDFKLSDEEMATILSFNRNWRACN
VLQSSHLEDYPFDAEY

WO 2004/030615

PCT/US2003/028547

2639/6881
FIGURE 2427

CAGAGTTTGGGCGCCAGGCGAGACGGCAGGGCTTAAAGTTCCGGGAATCAAAGATCAACTCCCCTGAGGACAAA
TGGACCTGTAATTCCGGGTGTGACGAGAGAACGAGATTTACCTTCCTGAATTAAAAACAGGTCATTAAGCTTGG
GCCCTGACTTTTCTTTGTGAGAAGGTACAGAGATGGAAACCTTACAATCCGAGACTAAAACGAGGGTCCCTCCCT
CATGGCTGACAGCCCAGGTGGCTACAAAGAATGTGGCACCAATGAAGGCCCCCAAGAGGATGAGAATGGCAGCAG
TGCCAGTGGCAGCAGCAAGACTCCCTGCGACAAGGACTGTGTACTGCATGAATGAGGCTGAGATAGTTGATGTTG
CTCTGGGAATCCTGATTGAGAGCCGAAACAGGAAAAGGCCTGCGAGCAGCCGGCCCTGGCGGGGGCTGATAACC
CAGAGCACTCCCCTCCCTGCTCCGTGTGCGCTCACACAAGTTCTGGGAGCAGCAGTGAGGAAGAGGACAGTGGGA
AACAGGCACTGGCTCCAGGCCTCAGCCCTTCCAGAGGCCGGGGGGTTCAGCTCTGCCTGTAGCAGGAGCCCTG
AGGAGGAGGAGGAAGAGGATGTGCTGAAATACGTCCGGGAGATCTTTTTTCAGCTAGGGCATAAACTGTGCACTGA
ACTGTCTGCCGAGAGCAGCTGGAGGACAGCTGAGCTTCCACTGGTGCTGCTGGGCCGCCCGCCTGTGGGAATGGG
GCTCTCTGTGCTCCTACCTTTGTGCCTTCTTGGGCCTGGCAGATTACCTCAGGCCAGAAGCCCCCTGGACACTCC
GGGCCTTGGGGCTGCCGTTCTGAGTGTGCGGAAGGCAGGACTCAAAATGAGATCCCATTGACTCCCTCTGTATG
TACTGTGCCCTCTCCTGGCTCTTGAGGCTCTGGAGTCCCAATTGTCTGTGTTAGTCAGTGACCAGGTTCAGGGA
AAATGATGTATGTGGTGGTCCAACCTTACTGGAACCAAAGAGACAGTACTTTGCAAAGAAAAGGATCACTGCCAG
GTGCACTGGAATTGCTACAGTTTAGTCCGCATGATCTCTCCTGAAGGAGGAAGCCTGTTTCAAAAATAGTTTCCA
TCATGAGTCTATCAATGAGCTCCCACCTCTCCAGCCAGCCTAGAAAGCAAACGAGCTGCCCACAGTTCTCTGCCC
TGTCTGGGAGGTTGAGGCCACAGTGTATAGACTGGTAAGCCAGACAGGCCTCCTCCCGCAAGCTGCTACCTTGCT
TTCACCTGTACCTTGGTCCCCGGGCAGCTAGCTATAAAGCAAAGAGGGACAGGAGCCCAGAAGAGACACTGAGGAC
AAGAGATCACACCAGAGTACATGTCTCTGCCTCTGTTTTCAGTGTGGCTTTGGACAGGAATATATGAATAAATCA
CTGCCATACAGGTTTTCCAATACACAAGTGCTAGAAAATACACACAATTCCCCAATGAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2640/6881
FIGURE 2428

MKAPKRMRAAVPVAAARLPATRTVYCMNEAEIVDVALGILIESRKQEKACEQPALAGADNPEHSPPCSVSPHTS
SGSSSEEEEDSGKQALAPGLSPSQRPGGSSSACSRSPEEEEEDVLKYVREIFFS

WO 2004/030615

PCT/US2003/028547

2641/6881
FIGURE 2429

GAGGTAGGCTCGGACCGGCCCGCGGAGCTGCTGCAGTCCTTCGCGCCCTCCTCGCCCTCCCCACCGACATCATGC
TCCAGTTCCTGATACCAAACCTGGCTAAAAAACTTGAAGAAATTAAAAAGGACTTGGATGCCAAGAAGAAACCCC
CTAGTGCATGAGACTGCCCTCCAGCACTGCCCTCAGGATATACTGATTCTACTGCTCTTGAGGGCCTCGTTTTACTA
TCTGAACCAAAAAGCTTTTTGTTTTCGTCTCCAGCCTCAGCACTTCTCTTCTTTGCTAGACCCTGTGTTTTTGTCTT
TAAAGCAAGCAAAATGGGGCCCCAATTTGAGAACTACCCGACATTTCCAACATACTCACCTCTTCCCATAATCCC
TTTCCAACCTGCATGGGAGGTTCTAAGACTGGAATTATGGTGCTAGATTAGTAAACATGACTTTTAAATGAGTAGTG
TCTTCTTTATCGTTTGCGATTTTTACTACCTTTTTTCAAAAAGAAAAATTGATGAGTTTTGTATAGCTGGTCAGAT
ACAAATAATAGTGACTTCACAGTTTAGTAATTATAATGGGTACTTGTAAACATTTGGTACTAAATTATGTTGCT
GCAAAGTAATTAAAATTAGTATCTAGAGCTAGTTTCTGGTGAATTATTCATTTATTTTGTACTGTTGTTAGGCAG
CTCTGTAGTTGCTAATTTAACCAATAAGTCAATTTGCTATTTCATGAAGAAACGATTCTGAGAATCCTGTGAGGAA
TTGGGGAATGAAAAAATACACAAAATAATGGTCTTTGTGCCAGTAGAGTTTCATAGTCTATTTAGTGTGCATGTTT
TTCCTTAATGATGTATTTGATCTGACTTTTTTTCCTTCTCAAAAAGAAATCATACTTGGGATTACAGGTACATTTGAT
GTTATATGATGGATAAGTGAAAAGTTTTTAAAGGAGATTTTATACCTTTTACATTAAAAAAGGTATTTATATTA
TTACTTTGTAGTGATTGTCTTAAGAAAAAATATAGCCCAATGTATAGTAAATCAGCAGCTCAAGAAGAATTTTC
TGCTTCTCTTTGTAGTTGATGCTTTGTTTTTTCCTGCAGTCAGAAATTCCTTGTATTTGTCAAATGTATAATCAG
CTTGATTGTTTTTAAATTAAAAAAATTTGAATAATTAACTTTTGCCATGGGACAAGATACAAAAGTAATTTCA
TATAAAGGGCCTCTCCCACCCCTGTTCTCTGGCTCCTGGCTCCTGTTTGACAAGTTACTGTTACCACTTCGCCTT
ATACTTTTGAGAAAGAGTCTGTGCCTAAACAAACACGTGTAACACAAATAGTAACTATACATGGAGGTCTAGCCC
TCACCTTTTTTTTTCTTTTTTTCTTTTTTAATGGAGATCATTCTATACCAGCATGTAAGTAGCAAGGAACCTCA
TTCTTTTTTTGGCTGCCTAAAATTTTTTGAATAGATATAACATAATTGATTTAATCTGCTACTGGTGAATGCTT
AGGTTGTTCTTTTGCTATTACAGTGATAACTTCAATCCTAATGTTATTAAGCATATCGATTTCAGGGTATAGCTAT
AAGATGAAGTCCATAAAAGTATAATTTAGACTAAATACAAATACCCATTTGCTAGCTGTTTTGTTTCAGAGGACT
TGTGAGCAGCTTCACTAATAATGCCATTTTTGAAGACATGGCAGGTTTCAAGTCAATAAACTGGAAGAATTGTT
CAGAGCATCTTTTTTCAGACAGTGATGACATTGATTCTGTATATGATAAAGTGATTCTGCTTCTCTTTGACAAC
TGATCTCTCCTACATGGAAGTAAGTTTTATTCTGTCAATGTTGTCTTTGTGTGTGACAGATTAGGATTAAATT
ATGGTTTGACTTTTCTAGCAGCGTGATCATGGGCAAGTGGCTTATTTTTTTTTTTTTTTTGGAGACAGAGTCTC
ACTCTGCTGCCAGGCTGGAGTGCACTGGCACAGTCTTGGCTCACTGCAACTCCTGCCTCCCGGTCCAAGTGATT
CTCGTGCTGCAGCTTCTCAAGTAGCTGGCATCACCAACACCTGGCTAATTTTTGTATTTTGTAGTAAACGACGAG
GTTTCACCATGTTGGCAAAGCTGGTCTCAAATTCCTGGCCTCAAGTGATCTGCCCACTTCAGCCTCCCAAAGTGT
TGGGATTACAGGCGTGAGCCACTGCGCCCGGCTTTTTTAACTTTTAGATTCAATTAATAGGTAAATTGCATGTC
ACGGGTTTGTAGCTTATTCTTTCAGAACTCTTGCAATTATCTGTAGACGTGGACGTAAATATCCACCTCATAGGG
TTTTCATAAAAAATAATTGAGATAATGTATGTAATGTTTCACAGTGCTTTGCAGACTATCTAATAAATAGTAGCT
ATTAGTACAAA

WO 2004/030615

PCT/US2003/028547

2642/6881
FIGURE 2430

CGCGGAGGAGAAGAGGAAGAGGAAGTTGGGGGAGGGTCCTAGCGGGGAGTGAACCGGAAGTGTAAGGTTCTGC
CTCTCCTCGGCCAGGCGGAACCTCTCTGCTGGGCCCGGTGGCCGCAAAAGAACTTTCTTTCTCCCGCCCGAACGG
TCGCCGCGGCCAACTGCCTCGCCCGCCTGGCAGCCTAACCTCCTTCTCTTCTCTCTCTCTCCGGCTTCGCGCGG
CCCTGCCTCCCTCTCGCCCGGCGGCATCCGCTTGCTGCTGCCACCGCCTCCTCATCTTCTGCCCGGCCAACCGGC
CTGCCCCGCTGCAGT**GATG**TGCGACAAGGAGTTCATGTGGGCCCTGAAAAACGGAGACTTGGATGAGGTGAAAGA
CTATGTGGCCAAGGGAGAAGATGTCAACCGGACACTAGAAGGTGGAAGGAAACCTCTTCATTATGCAGCAGATTG
TGGGCAGCTTGAAATCCTGGAATTTCTGCTGCTGAAAGGAGCAGATATTAATGCTCCAGATAAACATCATATTAC
TCCTCTTCTGTCTGCTGTCTATGAGGGTCATGTTTCCCTGTGTGAAATTGCTTCTGTCAAAGGGTGCTGATAAGAC
TGTGAAAGGCCCAGATGGACTGACCGCCTTTGAAGCCACTGACAACCGGCAATCAAAGCTCTTCTCCAG**TGATG**
GATGGATGGACTGATAACTCCGGAAGAATGACTCTCCTGTGGCCTCACACTGCTGCCTGTCTGTCTGTCACTCTC
TATCTGCCAGCTTCTTCAGCTAAATACTTTAAGAGGGGTGAGGGGAGAGAGAAATTCATAACAAATCCGACTACC
AGAAAAAATAATTTGTTTTGGAGGAGGGGCAAAAGGAACCATGATCAGGCTTTTACTGGGATTCTGATCAAGTA
AGCCTCTTCCCTTTCTAATAAAATATACACCTTATACCCAAGGGAGAGCAAAGACAAAATACACCAAGTAACATTT
GACCTTTTCAGCTCCCTAGCTAATTTATTAGATTGTGTTGAAGGTCTGATTCTACAAAGGCCAACTCTACATATT
TGGTAGCCCTAACTGTCTGAGCAGTAGTGGCTGCTGTGATGTAAACTTAGGGTGCTGAGATAAGCAATTAGCTCT
AGCCTTCTGCCTTAAGAATGCACTCTACTGGGGATTTCTGGCATAGTTAAGAGCGCTGCCTATAAGGTTGGTGA
CCAAATCTTTCCTCGGTGACTTTAAGCTTTATGTGAAAGCTTAGTTAAGGTGAGGAGGGGCACACTCCTAAATTG
CTGGATGACTGAACCTTTGGATTTTCTCTCCCTTTTCATGGAATTCATGTCTCTTTAGATAAACTGACTAGTT
TTATTTATAAAATCTTAAGTTTTGGAAGTCTAAAGGAGAAACCATTCAGTATGCATATTTTTTCTCTCTAGTA
TTCATACATTTATATAGCATTGAAACACTTTCAAACCTCTGCTGGTAGTAAAAGGGGATTTAAAAATAGAATCAT
AGCCATAAGCCTGTTAGTATCATATGAAGAGAGAACAGTTATCTTAGTACCTATGGATTTTCTTTATTTGCTGTT
TGAATGGATTGACCTTGGTTATGTGTTGAGAATTAAGGAACATTCTTTGAAATGCCTCTCTCAGACCCATCTTGG
AGGCTGATTACTTACTGCACCAAAGCTATCACTGGGGTGAGATTTACTGTTTGGACAAATTTAGCCCCATCCCTT
CAAAAATACACTTGTAAACCAGGTTTCCCAGAGTTGTTGATAGGCTTCTGCTGAACATATGCCAACCCACCTGCAT
AATATATTTTTGTTGCTTTTATAAATCATGCATTACATAAAGTGTGACAACTTCAAATGTATTCTCTGTTCTTG
GAATACAGTGCCCTAAATGGTGTTCTTATGACCTGCAGAAAATATTTACACATAAATAAGCAATTGCAGTGTTT
TGCATGCAAAATATAAAAAATTTAAATTGTCCTGATTCTATTTTGAAATGGAGAAACAATCATATCTTTCTAAG
CGGTAATGGAGGAAGACTAGTGCTTTGTGCATTTTGATATATTTGAGTTCATTTTTTCCACAATGTCATACTTTT
GACGCAGTTGGGTTTCTCATAAGTATCCTAGTTCATGTACATCCGAATGCTAAATAATACTGTGTTTTAAGTTTT
GTGTTGCAAGAACAAATGGAATAAACTTGAATTGTGCT

WO 2004/030615

PCT/US2003/028547

2643/6881
FIGURE 2431

MCDKEFMWALKNGDLDEVKDYVAKGEDVNRRTLEGGRKPLHYAADCGQLEILEFILLKGDINAPDKHHITPLLSA
VYEGHVSCVKLLLSKGADKTVKGPDGLTAFEATDNQAIAKALLQ

WO 2004/030615

PCT/US2003/028547

2644/6881
FIGURE 2432

ATGAGGCGGTTTTTCAGTAGTACAGAGGGTACTTTGCATATTAGACCTTTTCTGGCTCTTTTAACAAGGACGCTG
TTGCTTATTCCTAATAACAATGTCGTTCTCTGGCAGATTTCATAGTCCACCAGTCCAGCTCTGGCCCAAGATCTCCT
CTCACCATGATCCCAAGTTATTCTTTCCGGATATCATTAGGAAAGGACAGCGAATCATCCCTTTTCATCCTCTTC
CCATATGCCAACCCCTCACTCCCTCTTTTCTTATTTGCAATCAGAGAGGGAAGAATGCAGATCTGCCAAGTGCGT
TATAAATACTGTGAAACAAAAGGGACGCTCTGGGGCAGCGCAGGAGGGGTACAGTCCTACAAGGTGTCCACCTCT
GGCCCTTGGGCCTTCAGCAGCCGCTCCTGCACGAGTGGGCCCTGTGCCCGCATGAGCTCCTCGAGCTTCTCCCGA
GTGGACAGCAGCAGCTTTCGGGGTGGCCTGGGCAGCGGCTATGAGGTGAACCCCAACATCCAGGCCGTGCGCATC
CAGGGGAAGGAGCAGATCAAGACCCTCAACAAGAAGTTTGCCCTCCTTCATAGACAAGGTACGGTTCCTGGAGCAG
CAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGACGACTCGGAGCAACATGGACAACATG
TTCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGAAGCACTCTTCTTTTAAAAGTTTCTGA

WO 2004/030615

PCT/US2003/028547

2645/6881
FIGURE 2433

CTCTTTCCCATCTTGCAAGATGGCGGGTGAAAAAGTTGAGAAGCCAGATACTAAAGAGAAGAAACCTGAAGCCAA
GAAGGCTGATGCTGGTGGCAAGGTGAAAAAGGGTAACCTCAAGGCTAAAAAGCCCAAGAAGGGGAAGCCCCATTG
CAGCCGCAACCTGTCTATTGTCAGAGGAATTGGCAGGTATTCCCGATCTGCTATGTATTCCAGAAAGGCCATGTA
CAAGAGGAAGTACTCAGCCGCTAAATCCAAGGTTGAAAAGAAAAAGAAGGAGAAGGTTCTTGCAACTGTTACAAA
ACCAAGTTGGTGGTGACAAGAACGGCAGTACCCGGGTGGTTAAACTTCGCAAAATGCCTAGATATTATCCTACTGA
AGATGTGCCCTCGAAAGCTGTTGAGCCACAGCAAAAAACCCTTCAGTCAGCACGTGAGAAAACTGCGAGCCAGCAT
TACCCCCGGGACCATTCTGATCATCTCACTGGACGCCACAGGGGCAAGAGGGTGGTTTTCTGAAGCAGCTGGC
TAGTGGCTTGTTACTTGTGACTGGACCTCTGGTCCTCAATCGAGTTCTCTACGAAGAACACACCAGAAATTTGT
CATTGCCACCTCAACCAAAATCGATATCAGCAATGTAAAAATCCCAAAACATCTTACTGATGCTTACTTCAAGAA
GAAGAAGCTGCGGAAGCCCAGACACCAGGAAGGTGAGATCTTCGACACAGAAAAAGAGAAATATGAGATTACGGA
GCAGTGCAAGATTGAGCAGAAAGCTGTGGACTCACAAATTTTACCAAAAAATCAAAGCTATTCTCAGCTCCAGGG
CTACCTGTGATCTGTGGTTGCCCTGACGAATGGAATTTATCCTCACAAATTGGTGTCTAAATGTCTTAAGAACT
TAATTAAATAGTTGACTAC

PCT/US2003/028547

CAGGGCCCCCTGAGATCATCCTCTGGTTTACCATTTTGTGAGGCCAATTGACATGTGGTCCCTGGGCTGTGTTATTGCT
AGAATTGTTTCTCGGGTTGGCCGTTATATCCAGGAGCTTCGGAGTATGATCAGATTCCGGTATATTTACAAACACA
GGGTTTGCTGCTGAATATTTATTAAGCGCCGGGACAAAGACAAGTGGTATTTTCAACCGTGACACGGACTCACC
ATATCCTTTGTGGAGACTGAAGACACCAGATGACCATGAAGCAGAGACAGGGATTAAAGTCAAAAGAAGCAAGAAA
GTACATTTTCAACTGTTTAGATGATATGGCCAGGTGAACATGACGACAGATTGGGAAGGGAGCGACATGTTGGT
AGAAAAGGCTGACCGGCGGGAGTTTCATTGACCTGTTGAAGAAGATGCTGACCATTGATGCTGACAAGAGAATCAC
TCCAATCGAAACCCTGAACCATCCCTTTGTACCATTGACACACTTACTCGATTTTCCCCACAGCACACACGTCA
ATCATGTTTCCAGAACATGGAGATCTGCAAGCGTCGGGTGAATATGTATGACACGGTGAACCAGAGCAAAACCCC
TTTCATCACGCACGTGGCCCCCAGCACGTCCACCAACCTGACCATTGACCTTTAAACAACCAGCTGACCCTGTCCA
CAACCAGGCTCCCTCCTTACCAGTGCCACTATTTCTTAGCCAATCCCGAAGTCTCCATACTAAACTACCCATC
TACACTCTACCAGCCCTCAGCGGCATCCATGGCTGCAGTGGCCAGCGGAGCATGCCCTGCAGACAGGAACAGC
CCAGATTTGTGCCCCGGCTGACCGTTCCAGCAAGCTCTCATCGTGTGTCCCCCGGCTTCCAAGGCTTGCAGGC
CTCTCCCTCTAAGCACGCTGGCTACTCGGTGCGAATGGAAAATGCAGTTCCCATCGTCACTCAAGCCCCAGGAGC
TCAGCCTCTTCAGATCCAACCAGGTCTGCTTGCCAGCAGGCTTGCCCAAGTGGGACCCAGCAGATCCTGCTTCC
CCAGCATGGCAGCAACTGACTGGAGTGGCCACCCACACATCAGTGCAGCATGCCACCGTGATTCCCAGACCAT
GGCAGGCACCCAGCAGCTGGCGGACTGGAGAAATACGCATGCTCACGGAAGCCATTATAATCCCATCATGCAGCA
GCCTGCATATTGACCGGTCTGTGACCTTCCAGCAGCACAGCCCTTAAATGTGGGTGTGGCCACGTGATGCG
GCAGCAGCCAACCAGCACCACTCTCTCCGGAAGAGTAAGCAGCACCAAGTCTCATGTGAGAAATGTCTCCACCTG
TGAGGTGTCTCTCTCAGGCCATCAGCTCCACAGCGATCCAAGCGTGTCAAGGAGAACACACCTCCCCGCTG
TGCCATGGTGCACAGTAGCCCGGCTGCAGCACCTCGGTACCTGTGGGTGGGGCGACGTGGCCTCCAGCACCA
CCGGGAACGGCAGCGGCAGACAATTGTCTTCCGACACTCCAGCCCCACGGTGCAGCTCATCACCATCAGCAG
TGACACGGACGAGGAGGAGGAACAGAAACAGCCCCCACCAGCACTGTCTCCAAGCAAAGAAAAAACGTCTCAG
CTGTGTACAGTCCACGACTCCCCCTACTCCGACTCTCCAGCAACACCAGCCCCCTACTCCGTGCAGCAGCGTGC
TGGGCACAACAATGCCAATGCCTTTGACACCAAGGGGAGCCTGGAGAATCACTGCACGGGGAACCCCCGAACCAT
CATCGTGCCACCCCTGAAAACCCAGGCCAGCGAAGTATTGGTGGAGTGTGATAGCCTGGTGCCAGTCAACACCAG
TCACCCTCGTCTCTCTACAAGTCCAAGTCTCCAGCAACGTGACCTCCACCAGCGGTCACTCTTCAGGGAGCTC
ATCTGGAGCCATCACTACCGGCAGCAGCGGCCGGGCCCCCACTTCCAGCAGCAGCAGCCACTCAATCTCAGCCA
GGCTCAGCAGCATCACCAAGGACCGCACTGGGAGCCACCGAAGGCAGCAGGCCTACATCACTCCCACCATGGC
CCAGGCTCCGTACTCTTCCCGCACAAACAGCCCCAGCCACGGCACGTGTGCACCCGCATCTGGCTGCAGCCGCTGC
CGCTGCCACCTCCCCACCCAGCCCCACCTCTACACCTACACTGCGCCGGCGGGCCCTGGGCTCCACCGGCACCGT
GGCCACCTGGTGGCTCGCAAGGCTCTGCGCGCCACACCGTGCAGCACACTGCCACCCAGCCAGCATCGTCCA
CCAGGTCCCCGTGAGCATGGGCCCCCGGGTCTGCCCCGCCCCACCATCCACCCGAGTCAGTATCCAGCCCCAATT
TGCCCCACCAGACCTACATCAGCGCTCGCCAGCCTCCACCGTCTACACTGGATACCCACTGAGCCCCGCCAAGGT
CAACCAGTACCCTTACATATAAACACTGGAGGGGAGGGAGGGAGGGAGGGAGGGAGAGAATGGCCCCGAGGGAGGA
GGGAGAGAAGGAGGGAGGGCGCTCCTGGGACCGTGGGCGCTGGCCTTTTATACTGAAGATGCCGCACACAAACAAT
GCAAACGGGGCAGGGGCGGGGGGGGGGGGGGGGGGGCAGAGGGCAGGGGGACGGGTGGGGACACCAGTGAACTTGA
ACCGGGAAGTGGGAGGACGTAGAGCAGAGAAGAGAACATTTTAAAGGAAGGGATTAAAGAGGGTGGGAAATCT
ATGGTTTTTATTTTAAAAAA

WO 2004/030615

PCT/US2003/028547

2647/6881
FIGURE 2435

CCTGCGTGGCTGGGCTGCTCGGGTTAGATCGTCAGGAAAAGCCTAAAGATTAGACTGTAAGAAAAGAAAATAGAA
GCCATGTTTTCGAAGACCTGTATTACAGGTACTTCGTGAGTTTGTAAGACATGAGTCCGAAACAACCTACCAGTTTG
GTTCTTGAAAGATCCCTGAATCGTGTGCACTTACTTGGGCGAGTGGGTGAGGACCCCTGTCTTGAGACAGGTGGAA
GGAAAAATCCAGTCACAATATTTTCTCTAGCAACTAATGAGATGTGGCGATCAGGGGATAGTGAAGTTTACCAA
CTGGGTGATGTCAGTCAAAAGACAACATGGCACAGAATATCAGTATTCCGGCCAGGCCTCAGAGACGTGGCATAT
CAATATGTGAAAAAGGGGTCTCGAATTTATTTGGAAGGGAAAAATAGACTATGGTGAATACATGGATAAAAAATAAT
GTGAGGCGACAAGCAACAACAATCATAGCTGATAATATTATATTTCTGAGTGACCAGACGAAAGAGAAGGAGTAG

AAAGGATGATTCTTCTTTGGCCATCATTGTTACAGTCTCATTTCGAAGTCATGTATAATCTTTATGGCTTCCAA
GGACAAGAATTAAAATACTCTTTTACGT

WO 2004/030615

PCT/US2003/028547

2648/6881
FIGURE 2436

MFRRPVLQVLRQFVRHESETTTSLVLERSLNRVHLLGRVGQDPVLRQVEGKNPVTIFSLATNEMWRS GDSEVYQL
GDVSQKTTWHRISVFRPGLRDVAYQYVKKGSRIYLEGKIDYGEYMDKNNVRRQATTIIADNIIIFLSDQTKEKE

WO 2004/030615

PCT/US2003/028547

2649/6881
FIGURE 2437

GACCAGCCGTGCAAATCTCTAGAAGATGACGGTGTTCCTTTAAACGCTTCGAAATCACTGGAAGAAAACCTACAGC
TGGGCTCTGCCTGCTGACCTGGGGAGGCCATTGGCTCTATGAAAACACTGTGATAACCTCCTAAGGAGAGCAGC
CTGTCAAGAAGCTCAGGTGTTTGGCAATCAACTCATTCTCCCAATGCACAAGTGAAGAAGGCCACTGTTTTCT
CAATCCTGCAGCTTGCAAAGGAAAAGCTAGGACTCTATTTGAAAAAATGCTGCCCGATTTTACATTTATCTGG
CATGGATGTGACTATTGTTAAGACAGATTATGAGGGACAAGCCAAGAACTCCTGGAACCTGATGGAACACAGGA
TGTGATCATTGTTGCAGGAGGAGATGGGACACTGCAGGAGGTTGTTACTGGTGTCTTCGACGAACAGATGAGGC
TACCTTCAGTAAGATTCCCATTTGGATTTATCCCACTGGGAGAGACCAGTAGTTTGAGTCATACCTCTTTGCCGA
AAGTGGAACAAAGTCCAACATATTACTGATGCCACACTTGCCATTGTGAAAGGAGAGACAGTTCCACTTGATGT
CTTGAGATCAAGGGTGAAAAGGAACAGCCTGTATTTGCAATGACCGGCCCTTCGATGGGGATCTTTAGAGATGC
TGGCGTCAAAGTTAGCAAGTACTGGTATCTTGGGCCTCTAAAAATCAAAGCAGCCCACTTTTTAGCACTCTTAA
GGAGTGGCCTCAGACTCATCAAGCCTCTATCTCATACACGGGACCTACAGAGAGACCTCCCAATGAACCAGAGGA
GACCCCTGTACAAAGGCCTTCTTTGTACAGGAGAATATTACGAAGGCTTGCCTCTACTGGGCACAACCACAGGA
TGCCCTTTCCCAAGAGGTGAGCCCGGAGGTCTGGAAGATGTGCAGCTGTCCACCATTGAACCTGTCCATCACAAC
ACGGAATAATCAGCTTGACCCGACAAGCAAAGAAGATTTTCTGAATATCTGCATTGAACCTGACACCATCAGCAA
AGGAGACTTTATAACTATAGGAAGTCGAAAGGTGAGAAACCCCAAGCTGCAGTGGAGGGACGAGGTGTCTCCA
AGCCAGCCAGTGCACCTTGCTTATCCCGAGGGAGCAGGGGGCTCTTTAGCATTGACAGTGAGGAGTATGAAGC
GATGCCTGTGGAGGTGAACTGCTCCCCAGGAAGCTGCAGTCTCTGTGATCCTAGGAAGAGAGAACAGATGCT
CACAAGCCCCACCCAGTGAGCAGCAGAAGACAAGCACTCTGAGACCACACTTTAGGCCACCGGTGGGACCAAAAG
GGAACAGGTGCCTCAGCCATCCCAACAGTGTCTGTCAGAGGGTCCCCAGGGCATTTCATGGCAAGTACCCCTCTG
CCCCACTCCAGCAGTGCTTCCCAAGTGTGCTCTGTACCTGCTTTGCAATCGGCTTCCATTAGCGCATGTTTT
ATTTTGGTGTGACGGTTGGCCCTCCTAAACACGGACTTTCTCAGGCTGGTTCAAGACGGAAAAGGACTTTCTTC
TGTTTTCTTCCAAAGTGCAACCACAGTGGAGAGCCCACGGTGGGCTTAGCCTGCCTAGGCCCTTCCATTCTCTT
CTTTGACCGTGCTAGGAATTCCAGGAAAGTGCAATTCCTGCCCTGGTGACCTTTTCTATGTCTAGGCTCCTCCAC
AGGTGCTGCTATTTTGTGAGCTCCGGCICCTGTTTAGCTTTTATTTTCAAGTCTAACCTCAGTCCAGAAACATATG
TGAGGTTGTTTCCCTCTTCAGCCACGGCTACAATACCGGAAATGCTAGTTTTTATTTATTTTTTAAGTAGTGC
TTCTTAAATGGTTTGATGAGAGCCACCTGGGGTACATGTTGAAACTTATTTGGGGTCTACCCCAAACCTAATA
ACCCAAATTTGGGGATGGGGCCAGGAATATGCATTTTAAAAAGTCATCTGCCCTTCCAGGTGATTCTGTAAG
TTGTCCCTCAACTGTACTTGGAGAAATCGTGTTTTAAAGCAGTAGTCCACAAAGTATTCTGCTCATGTGCCCCCA
AAAGTATTTTGAAAAATCATGTATACCCTCACCATCTAAGTTGATATCTAAAATTTTATCTAAGTTGGTATCTA
AAATTTTTCATGGGAAGTTAAATAGTTGACAAAGTATGTATTTGCTGGTGTCTGTAAATATTGGTATTTTAAAA
TAAAACTGTTACATCACTATTTTAAACATATCCAGTACAATTTAAATATCACAACAATTTGACACCCCTCATT
ATTTATAAAAATAAATGAGCTAGTTCTTTAGTAGTTAAACATTTCAAATGGCTTTTCTCCTTCTGTATTTCCAT
ACCACTTTTAGCCAAGAATCCTATCATATAATGTAATCTATTATGCCCGACATCTTTAATCATTACCCCATTTAC
TTCTTGTCACAAAAAATATAAATGGAAATTTTTTTTTTAGCTCTTGCTTAAAGTGTGTTGTTGTTATCTCAGTC
CAGAACCAATATTATCGTAATTAATTATTGGTATATAATGAAAACGGTATTAATCTTGATGATTAAAGTTTT
TTTATTAGAATGTTCTTTATCCTAATTAGTTCATTTATCCAAGAATACATGAATGTGATTTACAGCTGAGATGGG
GTTCAACCTCAGCTGTATTCCTTGTTTCTGTATAGATGTAAGCACATAAATTCGATGGAATAGAATTACGTTAAC
AATGAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2650/6881
FIGURE 2438

MTVFFKTLRNHWKKT TAGLCLLTWGGHWLYGKHCDNLLRRAACQEAQVFGNQLIPPNAQVKKATVFLNPAACKGK
ARTLFEKNAAPILHLSGMDVTIVKIDYEGQAKKLELEMENTDVIIIVAGGDGTLQEVVTGVLRRRTDEATFSKIPIG
FIPLGETSSLSHTLFAESGNKVQHITDATLAIVKGETVPLDVLQIKGEKEQPVFAMTGLRWGSFRDAGVKVSKYW
YLGPLKIKAAHFFSTLKEWPQTHQASISYTGPTERPPNEPEETPVQRPSLYRRI LRRLASYWAQPQDALSQEVSP
EVWKDVQLSTIELSITTRNNQLDPTSKEDFLNICIEPDTISKGDFITIGSRKVRNPKLHVEGTECLQASQCTLLI
PEGAGGSFSIDSEYEAMPVEVKLLPRKLQFFCDPRKREQMLTSPTQ

WO 2004/030615

PCT/US2003/028547

2651/6881
FIGURE 2439

CGCCTCCCTTCCCCCTCCCCGCCCGACAGCGGCCGCTCGGGCCCCGGCTCTCGGTTATAAGATGGCGGGCGCTGAG
CGGTGGCGGTGGTGGCGGCGCGGAGCCGGGCCAGGCTCTGTTCAACGGGGACATGGAGCCCGAGGCCGGCGCCGG
CGCCGGCGCCGCGGCCCTCTTCGGCTGCGGACCCTGCCATTCCGGAGGAGGTGTGGAATATCAAACAAATGATTAA
GTTGACACAGGAACATATAGAGGCCCTATTGGACAAATTTGGTGGGGAGCATAATCCACCATCAATATATCTGGA
GGCCTATGAAGAATACACCAGCAAGCTAGATGCACTCCAACAAAGAGAACAACAGTTATTGGAATCTCTGGGGAA
CGGAAGTGAATTTTCTGTTTCTAGCTCTGCATCAATGGATACCGTTACATCTTCTTCTCTTCTAGCCTTTCAGT
GCTACCTTCATCTCTTTCAGTTTTTCAAATCCCACAGATGTGGCACGGAGCAACCCCAAGTCACCACAAAAACC
TATCGTTAGAGTCTTCTGCCCCAACAAACAGAGGACAGTGGTACCTGCAAGGTGTGGAGTTACAGTCCGAGACAG
TCTAAAGAAAGCACTGATGATGAGAGGTCTAATCCCAGAGTGTGTGCTGTTTACAGAATTCAGGATGGAGAGAA
GAAACCAATTGGTTGGGACACTGATATTTCTGGCTTACTGGAGAAGAATTGCATGTGGAAGTGTGGAGAATGT
TCCACTTACAACACACAACCTTTGTACGAAAAACGTTTTTACCTTAGCATTTTGTGACTTTTGTGCGAAAGCTGCT
TTTCCAGGGTTTTCCGCTGTCAAACATGTGGTTATAAATTTACCAGCGTTGTAGTACAGAAGTTCCACTGATGTG
TGTTAATTATGACCAACTTGATTTGCTGTTTGTCTCCAAGTTCTTTGAACACCACCCAATACCACAGGAAGAGGC
GTCCTTAGCAGAGACTGCCCTAACATCTGGATCATCCCCTTCCGCACCCGCTCGGACTCTATTGGGCCCAAAT
TCTCACCAGTCCGCTCTCTTCAAATCCATTCCAATTCCACAGCCCTTCCGACCAGCAGATGAAGATCATCGAAA
TCAATTTGGGCAACGAGACCGATCCTCATCAGCTCCCAATGTGCATATAAACACAATAGAACCTGTCAATATTGA
TGACTTGATTAGAGACCAAGGATTTCTGTTGATGGAGGATCAACCACAGGTTTGTCTGCTACCCCCCTGCCTC
ATTACCTGGCTCACTAACTAACGTGAAAGCCTTACAGAAATCTCCAGGACCTCAGCGAGAAAGGAAGTCATCTTC
ATCCTCAGAAGACAGGAATCGAATGAAAACACTTGGTAGACGGGACTCGAGTGATGATTGGGAGATTCTGATGG
GCAGATTACAGTGGGACAAAGAATTGGATCTGGATCATTGGAACAGTCTACAAGGGAAAGTGGCATGGTGATGT
GGCAGTGAAAATGTTGAATGTGACAGCACCTACACCTCAGCAGTTACAAGCCTTCAAAAATGAAGTAGGAGTACT
CAGGAAAACACGACATGTGAATATCCTACTCTTCATGGGCTATTCCACAAAGCCACAACCTGGCTATTGTTACCCA
GTGGTGTGAGGGCTCCAGCTTGTATCACCATCTCCATATCATTGAGACCAATTTGAGATGATCAAACCTTATAGA
TATTGCACGACAGACTGCACAGGGCATGGATTACTTACACGCCAAGTCAATCATCCACAGAGACCTCAAGAGTAA
TAATATATTTCTTCATGAAGACCTCACAGTAAAAATAGGTGATTTTGGTCTAGCTACAGTGAAATCTCGATGGAG
TGGGTCCCATCAGTTTGAACAGTTGTCTGGATCCATTTTGTGGATGGCACCAGAAGTCATCAGAATGCAAGATAA
AAATCCATACAGCTTTCAGTCAGATGTATATGCATTTGGAATTGTTCTGTATGAATTGATGACTGGACAGTTACC
TTATTCAAACATCAACAACAGGGACCAGATAATTTTATGGTGGGACGAGGATACCTGTCTCCAGATCTCAGTAA
GGTACGGAGTAACTGTCCAAAAGCCATGAAGAGATTAATGGCAGAGTGCCTCAAAAAGAAAAGAGATGAGAGACC
ACTCTTTCCCCAAATTCTCGCCTCTATTGAGCTGCTGGCCCGCTCATTGCCAAAATTCACCGCAGTGCATCAGA
ACCCCTCCTTGAATCGGGCTGGTTTCCAAACAGAGGATTTTAGTCTATATGCTTGTGCTTCTCCAAAACACCCAT
CCAGGCAGGGGGATATGGTGCCTTCTGTCCACTGAAACAAATGAGTGAGAGAGTTCCAGGAGAGTAGCAACAAA
AGGAAAATAAATGAACATATGTTTGCTTATATGTTAAATTGAATAAAATACTCTCTTTTTTTTTAAGGTG

WO 2004/030615

PCT/US2003/028547

2652/6881
FIGURE 2440

GGCACGAGGGTGTCCCTCCCCGCCCGGCTGGAGGCTGCTCCGGACCGGGACGCAGAGTCTGCGGACCCGGCGCCG
AGGCGGCCACCCGAGACGCGGCGCGCACGCTCCGGCCTGCGCAGCCC~~GGCCCGGCC~~**ATGG**CGGCCCCCCCGCCCGT
CTCCCGCGATCTCCGTTTTCGGTCTCGGCTCCGGCTTTTTACGCCCCGCAGAAGAAGTTCGGCCCTGTGGTGGCC
CAAAGCCCCAAGTGAATCCCTTCCGGCCCGGGACAGCGAGCCTCCCCGGCACCCGGGGCCAGCGCGCACAGA
TGGGCCGGGTGGGCGAGATTCCCCGCCGCCCGCGAAGACTTTCCCTGCCTCCACCTCCCTTGCTGGGGATG
GCGACGATGCAGAGGGTGTCTGGGAGGTGCCTTCCCGCCGCCCTCCCCGATCGAGGAATCATTCCCCCTG
CGCTCTGGAGGAGGAGATCTTCCCTTCCCCGCCGCTCCTCCGGAGGAGGAGGGAGGGCCTGAGGCCCCATAC
CGCCCCACCACAGCCAGGGAGAAGGTGAGCAGTATTGATTGGAGATCGACTCTGTCTCTACTGTGGATG
ACATGACCAAGAATGATCCTTTCAAAGCCCGGGTGTCTATCTGGATATGTGCCCCACCAGTGGCCACTCCATTCA
GTTCCAAGTCCAGTACCAAGCCTGCAGCCGGGGGCACAGCACCCCTGCCTCCTTGGAAGTCCCTTCCAGTCCCC
AGCCTCTGCCCCAGGTTCGGCTCCGGCTCAGAGCCAGACACAGTTCCATGTTTCAGCCCCAGCCCCAGCCCAAGC
CTCAGGTCCAACCTCCATGTCCAGTCCAGACCCAGCCTGTGTCTTTGGCTAACACCCAGCCCCAGGGGCCCCAG
CCTCATCTCCGGCTCCAGCCCCTAAGTTTTCTCCAGTGAATCCTAAGTTTACTCCTGTGGCTTCCAAGTTCAGTC
CTGGAGCCCCAGGTGGATCTGGGTCAACCAAAATCAAAAATTGGGGCACCCCGAAGCTCTTTCTGTGGCACAG
GCTCCCCCTCAACCTCCAGCTTACCTATGCCAGCAGAGGGAGAAGCCCCGAGTGCAGGAGAAGCAGCACCCCG
TGCCCCACCGGCTCAGAACCAAAACCAGGTGCGCTCCCTGGGGCCCCAGGGCCCCTGACTCTGAAGGAGGTGG
AGGAGCTGGAGCAGCTGACCCAGCAGCTAATGCAGGACATGGAGCATCCTCAGAGGCAGAATGTGGCTGTCAACG
AACTCTGCGGCCGATGCCATCAACCCCTGGCCCGGGCGCAGCCAGCCGTCCGCGCTCTAGGGCAGCTGTTCCACA
TCGCCTGCTTACCTGCCACCAGTGTGCGCAGCAGCTCCAGGGCCAGCAGTTCTACAGTCTGGAGGGGGCGCCGT
ACTGCGAGGGCTGTTACACTGACACCCTGGAGAAGTGTAACACCTGCGGGGAGCCCATCACTGACCGCATGCTGA
GGGCCACGGGCAAGGCCTATCACCCGCACTGCTTACCTGTGTGGTCTGCGCCCGCCCCCTGGAGGGCACCTCCT
TCATCGTGGACCAGGCCAACCGGCCCACTGTGTCCCCGACTACCACAAGCAGTACGCCCCGAGGTGCTCCGTCT
GCTCTGAGCCCATCATGCCTGAGCCTGGCCGAGATGAGACTGTGCGAGTGGTTCGCCCTGGACAAGAAGTCCACA
TGAAGTGTTACAAGTGTGAGGACTGCGGGAAGCCCCGTGTCGATTGAGGCAGATGACAATGGCTGCTTCCCCCTGG
ACGGTCACGTGCTCTGTGGAAGTGCCACACTGCTAGAGCCAGACCT**AG**AGTGAGGACAGGCCCTCTCAGACCG
CAGTCCATGCCCCATTGTGGACCACCCACACTGAGACCACCTGCCCCACCTCAGTTATTGTTTTGATGTCTAGC
CCCTCCCATTTCGAACCCCTCCCTAGCATCCCAGGTGCCCTGACCCAGGACCCAACATGGTCTAGGGATGCAGGA
TCCCCGCCCTGGGTCTGGTCTCGCCATCCTGCAGGGATTGCCACCGTCTTCCAGACACCCACCTGAGGGG
GGCACCAGGTTTAGTGCTGTGCTTTCACTGCTGCACCCGCGCCCTCGGCCGGCCCCCGAGCAGCCTTTGTACT
CTGCTTGCGGAGGGCTGGGAGACCCTCCAGGACATTCCACCCCTCCCCCATGCTGCCAAGTTGTAGCTATAGCTA
CAAATAAAAAAAAAACCTTGTTTTCCAGAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2653/6881
FIGURE 2441

MAAPRPSPAISVSVSAPAFYAPQKKFGPVVAPKPKVNPFRPGDSEPPAPGAQRAQMGRVGEIPPPPPEDFPLPP
PPLAGDGDDAEGALGGAFPPPPPIEESFPPAPLEEEIFPSPPPPPEEEGGPEAPIPPPPPPREKVSSIDLEIDS
LSSLLDDMTKNDPFKARVSSGYVPPPVATPFSSKSSTKPAAGGTAPLPPWKSPSSSQPLPQVPAPAQSQTOFHVQ
PQPQPKPQVQLHVQSQTQPVSLANTQPRGPPASSPAPAPKFSPVTPKFTPVASKFSPGAPGGSGSQPNQKLGHPE
ALSAGTGSPQPPSFTYAQQREKPRVQEKQHPVPPPAQNQNQVRSPGAPGPLTLKEVEELEQLTQQIMQDMEHPQR
QNVAVNELCGRCHQPLARAQPAVRALGQLFHIACFTCHQCAQQQLQGQQFYSLGAPYCEGCTDTLEKCNCTGEP
ITDRMLRATGKAYHPCFTCVVCARPLEGTSFIVDQANRPHCVDPYHKQYAPRCSVCSEPIMPEPGRDETVRVVA
LDKNFHMCKYKCEDCGKPLSIEADDNGCFPLDGHVLCRKCHTARAQT

WO 2004/030615

PCT/US2003/028547

2654/6881
FIGURE 2442

GGCACGAGGGGCGGCGGAGCCGACTCGTCGCGGCCGAGGCGCACGCGGTCCGCGCCGGCGTCAGTCTGGGATTGG
CCGGCCCCGCGACTTCCTCCGCCCCCTGCCAATCGCCGGGACGACTTCCTGGGTTTTTCCGGCTCTCCCGCGTC
GCTAAGGAGCGACGGGCTGTGCGCCAGACCCGAGTTCTCGGTGCGCTCAGCGGCCCGCGACGCTAGGAGGCCGC
GCTCCGCCCCCGTACCATGAGGCCCGGAAAGCCTTCCTGCTCCTGCTGCTCTTGGGGCTGGTGCAGCTGCTGG
CCGTGGCGGGTGCCGAGGGCCCGGACGAGGATTCTTCTAACAGAGAAAATGCCATTGAGGATGAAGAGGAGGAGG
AGGAGGAAGATGATGATGAGGAAGAAGACGACTTGAAGTTAAGGAAGAAAATGGAGTCTTGGTCTTAAATGATG
CAAACTTTGATAATTTTGTGGCTGACAAAGACACAGTGCTGCTGGAGTTTTATGCTCCATGGTGTGGACATTGCA
AGCAGTTTGCTCCGGAATATGAAAAAATTGCCAACATATTAAAGGATAAAGATCCTCCCATTCCTGTTGCCAAGA
TCGATGCAACCTCAGCGTCTGTGCTGGCCAGCAGTTTGATGTGAGTGGCTACCCCAACCATCAAGATCCTTAAGA
AGGGGCGAGGCTGTAGACTACGAGGGCTCCAGAACCAGGAAGAAAATTGTTGCCAAGGTGAGAGAAGTCTCCAGC
CCGACTGGACGCCTCCACCAGAAGTCACGCTTGTGTTGACCAAAGAGAACTTTGATGAAGTTGTGAATGATGCAG
ATATCATTCTGGTGGAGTTTTATGCCCCATGGTGTGGACACTGCAAGAACTTGCCCCCGAGTATGAGAAGGCCG
CCAAGGAGCTCAGCAAGCGTTCTCCTCCAATTCCTTGCCAAAGGTGCGACGCCACCGCAGAAACAGACCTGGCCA
AGAGGTTTGATGTCTCTGGCTATCCCACCCTGAAAATTTCCGCAAAGGAAGGCCCTTATGACTACAACGGCCCCAC
GAGAAAAATATGGAATCGTTGATTACATGATCGAGCAGTCCGGGCCCTCCCTCCAAGGAGATTCTGACCCTGAAGC
AGGTCCAGGAGTTCTTGAAGGATGGAGACGATGTATCATCATCGGGGTCTTTAAGGGGGAGAGTGACCCAGCCT
ACCAGCAATACCAGGATGCCGCTAACACCTGAGAGAAGATTACAAATTTACCACACTTTTCAGCACAGAAATAG
CAAAGTTCTTGAAAGTCTCCAGGGGCGAGTTGGTTGTAATGCAGCCTGAGAAAATTCAGTCCAAGTATGAGCCCC
GGAGCCACATGATGGACGTCCAGGGCTCCACCCAGGACTCGGCCATCAAGGACTTCGTGCTGAAGTACGCCCTGC
CCCTGGTTGGCCACCGCAAGGTGTCAAACGATGCTAAGCGCTACACCAGGCGCCCCCTGGTGGTCTCTACTACA
GTGTGGACTTCAGCTTTGATTACAGAGCTGCAACTCAGTTTTGGCGGAGCAAAGTCTTAGAGGTGGCCAAGGACT
TCCCTGAGTACACCTTTGCCATTGCGGACGAAGAGGACTATGCTGGGGAGGTGAAGGACCTGGGGCTCAGCGAGA
GTGGGGAGGATGTCAATGCCGCCATCCTGGACGAGAGTGGGAAGAAGTTCGCCATGGAGCCAGAGGAGTTTGACT
CTGACACCCTCCGCGAGTTTGTCACTGCTTTCAAAAAAGGAAAATGAAGCCAGTCATCAAATCCCAGCCAGTGC
CCAAGAACAACAAGGGACCCGTCAGGTGCTGGTGGGAAAGACCTTTGACTCCATTGTGATGGACCCCAAGAAGG
ACGTCTCATCGAGTTCTACGCACCATGGTGCGGGCACTGCAAGCAGCTAGAGCCCGTGTACAACAGCCTGGCCA
AGAAGTACAAGGGCCAAAAGGGCCTGGTCATCGCCAAGATGGACGCCACTGCCAACGACGTCCCCAGCGACCGCT
ATAAGGTGGAGGGCTTCCCCACCATCTACTTCGCCCCAGTGGGGACAAAAAGAACCCAGTTAAATTTGAGGGTG
GAGACAGAGATCTGGAGCATTGAGCAAGTTTATAGAAGAACATGCCACAAAATGAGCAGGACCAAGGAAGAGC
TTTGAAGGCCCTGAGGTCTGCGGAAGGTGGGAGGAGGCAGACACCCTGCGTGGCCCATGGTCCGGGGCGTCCACGCC
GAGGCCGGCAACAAACGACAGTATCTCGGATTCTTTTTTTTTTTTTTTTAAATTTTTTATACCTTGGTGTTCAC
TTCATGCTCTGAATACTGAATAACCATGAATGACTGAATAGTTTAGTCCAGATTTTACAGAGGATACATCTATT
TTTATCATTATTTGGGGTTTGAAAAATTTTTTTTTTACACCTTCTAATTTCTTATTCTCAAAGCAGATAATTCT
TCTGTGTGAAAATGTTTTCTTTTTTTAATTTAAGGTTTAAATTCCTTTGCCAAATCATGTTGATTTTGCTCTTT
GCTTTTTCTGTGCTGAGAAATTGTTGGCGTAGATTTGGCTTCTGGTATGTGTTTCTGATTGCTTCTGTTGAGC
ACAAAGTGAGAGCTGCCACTGAGCAGCCCTGCCAGGGGTGCTGTTTCAGGCTGGGCATCGCCAGGCGGCCCTCCCT
GCAAACCAAGGGCTGGGGGCAAAGGGGCATGATCCAGGGTCCCCAGGGTGGGCTCAGCTCCAGGGAGAGGCCAC
CCAGCTGGCAGCCCCACCTCTTGAGAGCCCCAGTGCCGGAGCAGAAAGGACCCTGGACCCAGAGGCAGATACTG
CGGGGTGGTAGAAAAGGTAGAGTAGGCTGTGGCAATGGAATAAAACACGATTAAAAACGTTAAAAA
AAAAA

WO 2004/030615

PCT/US2003/028547

2655/6881
FIGURE 2443

MRPRKAFLLLLLLGLVQLLAVAGAEGPDEDSSNRENAIEDEEEEEEDDDDEEEDDLEVKEENGVLVLNDANFDNF
VADKDTVLLLEFYAPWCGHCKQFAPEYEEKIANILKDKDPPIPVAKIDATSASVLASRFDVSGYPTIKILKKQAVD
YEGSRTQEEIVAKVREVSQPDWTTPPEVTLVLTKENFDEVNDADIILVEFYAPWCGHCKKLAPEYEKAAKELSK
RSPPIPLAKVDATAETDLAKRFDVSGYPTLKIFRKGRPYDYNPREKYGIVDYMIEQSGPPSKEILTTLKQVQEF
KDGDDVIIIGVFKGESDPAYQQYQDAANNLREDYKFHHTFSTEIAKFLKVSQQLVVMQPEKFQSKYEPRSHMD
VQGSTQDSAIKDFVLKYALPLVGHRKVSNDKRYTRRPLVVVYYSVDFSFDYRAATQFWRKVLVAKDFPEYTF
AIADEEDYAGEVKDLGLSESGEDVNAAILDESGKKFAMEPEEFDSDTLREFVTAFKKGKLKPVIKSQPVKNNKG
PVKVVVGKTFDSIVMDPKKDVLIIEFYAPWCGHCKQLEPVYNSLAKKYKGQKGLVIAKMDATANDVPSDRYKVEGF
PTIYFAPSGDKKNPVKFEGGDRDLEHLSKFIEEHATKLSRTKEEL

WO 2004/030615

PCT/US2003/028547

2656/6881
FIGURE 2444A

GCCGCCGAAGGGGACTGTTTGCTCCTACGGGCTGTAGATGGAGCTGTCCGGCCCCGAGAGGGGGAAGGCGCCTG
GAAAACGTTTCTTCTTCTCCCTGGCCGACCCGAGCGGGGAACAGCACTCCCAGGATCAGTGTGTCAACACGGC
CGCAGCCTCAGCAGCTGGGCATCCAGGGCCTGGGGCTGGACAGCGGGAGCTGGAGCTGGGCCCAGGCTCTGCCCC
CGGAGGAGGTCGTGCCACCAGGAGCCGGCGCTGCGCGGGGAAATGGCCGAGGGAATGCCGCCCATGCAGGCTCAAG
AATGGGACATGGACGCCCGGGCGGCCAATGCCTTTTCAGTTCCCAACCTTTCCAGATAGGGCACCTGTCTTCCCCG
ACCGCATGATGCGAGAGCCCCAGTTGCCACAGCAGAGATCTCACTCTGGACTGTGGTGGCTGCCATTAGGCTG
TGGAGAGGAAGGTGGATGCCAGGCCAGCCAGCTGCTGAACCTGGAGGGGCGCACGGGGACAGCCGAGAAGAAGC
TGGCCGACTGTGAAAAGACGGCCGTGGAATTTGGGAACCATGGAGAGCAAGTGGGCCGTGTGGGGACCCTGC
TGCAGGAGTACGGGCTGTGTCAGAGGCGGCTGGAGAACTTGGAGAACTTGTGCGCAACAGGAACTTCTGGGTCC
TGCGGCTGCCCCCGGGCAGCAAGGGGGAGGCCCCCAAGGTTCCAGTGACTTTTGTGACATTGTGTGTACTTCT
CCGAAGACGAGTGAAGAAGTGGACGAATGGCAGAAAGGAGCTTTATAACAACCTTGTTAAGGAGAACTACAAAA
CCCTCATGTCCCTGGACGCGGAGGGCTCAGTCCCCAAGCCAGATGCTCCAGTCCAGGCTGAGCCCAGGGAAGAAC
CTTGTGTGTGGGAGCAGCGCCACCCCGAAGAGAGAGAAATCCCAATGGATCCCGAAGCAGGAGCAGAGCCCCCTGG
TGCTGCGCAGGATGCGTCTCTCCAGGTGAAGCGTGAGGACACCCTGTGTGTCCGGGGTCAGCGGGGCTGGAGG
AAAGAGCCATCCCTACGGAATCCATTACCGACTCCCCAATTTCTGCCAGGACCTCTTGTCCCGGATTAAACAGG
AGGAGCATCAGTGCCTGTGGGATCAGCAGGATTGGCAGACAGAGATATCCACGGATCCCAATTAGAGTCTC
TCATCTCAGCACATGACATTTTGTCTATGGATCAAGCAGGAGGAGCAGCCATACCCATGGGGACCACGCGACTCAA
TGGACGGAGAGCTTGGATTAGACTCTGGCCCTAGTGACAGCCTGTGATGGTGAAGAACCCACCCCGGCCCCGC
CACAGCCCCAGCCCCAGCCCCAGCCACCGCAGCCGAGCTGCAGTCGAGCCCCAGCCCCAGAGCCTGCCCCCA
TCGCGGTGGCCGAGAACCCGGGCGGCCCGGAGCCGAGGGCTGTGAGCAGCGGTTTCCAGGTGCTGCCCGGG
AGCGTGGCTCCGGCGAGGCGCCGCCGGGTGGGGACCGCAGCACCAGGGGGCGGCGGGGGCGATGGGGGCGGTGGG
GCGGCGGCGCGGAGGCGGGGACGGGGCAGGCGGCGGCTGTGCGAGCTGCTGCCCTGGCGGGCTGCGGCGGAGCC
TCCTCCTGCACGGCGCCCGCAGCAAGCCCTACTCGTGCCCCGAGTGCGGCAAGAGCTTCGGCGTGCGAGAAGACCT
ACTCGGGCTCATCCGCCACCAGATGACGCACCGCGGCGAGCGGCCCTACAAGTGTCTCGGAGTGCGAGAAGACCT
ACAGCCGTAAAGGAGCACCTGCAGAACCCAGCGGCTGCACACGGGCGAGCGGCCCTTTCCAATGTGCACTGTGCG
GCAAGAGCTTCATCCGCAAGCAGAACCTGCTCAAGCACCAGCGCATCCACACGGGCGAGCGCCCCCTACACGTGCG
GCGAGTGCGGCAAGAGCTTCCGCTACAAGGAGTGCCTCAAGGACCACCTGCGCGTGACAGCGGCGGCCCCGGGCC
CCGGGCCCCCCAGGCTCCCGCGGCTCCTGAGCGAGACTAGGGCTGGGCTGGGGGAGGGCAGGGCCGGACGG
AGTGGATCGGGGGCGGCTGAGCACCAACCACCTTGCCGGGTGTCTCCTCAGCCACCGTCTGGAATCGGCAACAGG
CATTGCACTCCGGTTGGGGGTCCCCAGGGTGGGGCAGGGATCCCCAGATCTGTCTGGTCTGAATGGACGCCAG
CTCATCTAGGGTGGACCCAGCTGTGGGGAAGAGCCAGGGGGACCGCGAGGAGCCGAGCGTCTCGGGCACC GCC
CTCACACCTCCTCGAGTGCCCTGGGACCACTGGGCCACAGATGGTTCATCAGGGGAAGCCACCAGGGAGTCCCGAA
GCCCTTCTGAGATCAGGAAATCAGGTCCCAAGGTTAGGAGACGCCCTGAAAAAAGCGAAGGCCGAGGGATGTGC
TAAGGGTAACACCTTCATGATGACAACACTGCCTCGCGTTTTCAATAGCGCTTTATACTTTTTTAAGTGTTTTCTA
TCCGTTATCCATTTCACCTTGGCCTATCCCTCTCAGATAGGTGGGGTAGGATTTTCTGGTGACCGAGTAAAGT
GAGAGGCAGGTGAGACGGTTCACCAATCACACGGGAAGGGGCGCGCTGCCCAACCGCGCTCTCCGCCTACCT
CCGCTGCTCGGGAAGCTGCTGGCCTGGCCCTCCTGGTCTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTGCTC
TCACCCACGGATAAAACAGAGCGACAGGAGGCCAGCTCCTGGGGTTCTGGGAGCCGGGAACAGATTGGCTAC
GGAACGCCCCAGGTGTGATTCAGAGGGCTCTTCTCCATGGGAGCTCCTGGTGCGCCTCGGCCCCAGCCTGT
CCCCAGCCCCCTCAATCTGGTGCAGCAGCATCTTGTCACTGCACAACAGTGGCCTGGTCCCCACAGGCAGTTAGG
GCCCCAGGTGAGACCTCACCATGATGATTTGTTCCAGTTCTCCAGGGCAGAGGGGCGAGGGAGAGGCTTTTGCT
GTGAGAGTAGCCGTACGCTGTCTTCTCCAGCAGCGCCGGGCAAGTGGGTGCTAGAGTCTGAGCCTCAGGCTCTC
CTGCCCTGGGCCTCCCAATTGGTGCTATCTGTTACTGCCGTGCTCACGGACATGGATACAGACCCTGCTGTGCT
CCACACCCTGCAGGCGCCTCGGGAAGCGCCCAAAGGATTCCCTTTCAGTTGGTGCACCTGCTCCATAGCTCCGG
GCGCTGCGTCCCGAGGGGCCACAGTCTCCATTTACGCTCTTGATGGCCTGGCACCGGGTGGGTGGTATGCC
CAGGACCCTTGTGTGTCAAAAATGACTTTCCCTGCCCTTGGCGTGGGTCCGGCGTTCTCCAGCCGGGATCA
CAGTGGGCAGCCGGCACCCGGCACCACTTTGGCGAGCGTCTGCTTCCGCCCTCGCCCTCATCTACGCTGCTCCG

WO 2004/030615

PCT/US2003/028547

2657/6881
FIGURE 2444B

CTTTCCTCAGACCCCTTTTTGCCGTGCAAAGGGAATTCTTGACATTAAATAAAAGGTATCCAGATTGCAGACTGC
ATGTTACAGAGCTGGGGGTTCTCCAGCTTGCCTACAGTAAAGCCTCAATGAACTGG

WO 2004/030615

PCT/US2003/028547

2658/6881
FIGURE 2445

MQFVSTRPQPQQLGIQGLGLDSGSWSWAQALPPEEVCHQEPALRGEMAEGMPPMQAQEWMDMDARRPMPFQFPPFP
DRAPVFPDRMMREPQLPTAEISLWTVVAAIQAVERKVDAQASQLLNLEGRGTAEKKLADCEKTAVEFGNHMESK
WAVLGTLLQEYGLLQRRLENLENLLRNRNFWVLRLEPFGSKGEAPKVPVTFVDIAVYFSEDEWKNLDEWQKELYN
LVKENYKTLMSLDAEGSVKPDAPVQAEFREPCVWEQRHPEEREIPMDPEAGAEPLVPAQDASSQVKREDTLCV
RGQRGLEERAIPTESITDSPISAQDILLSRIKQEEHQCVWDQQDLADRDIPDENSESLISAHDILSWIKQEEQPY
PWGPRDSMDGELGLDSGPSDSLIMVKNPFPAPPQFPQFPQFPQFPQFQSQPQPQPSLPPIAVAENPGGPPSRGLDD
GFQVLPGERGSGEAPPGGDRSTGGGGDGGGGGGAEAGTGAGGGCGSCCPGGIRRSLLLHGARSKPYSCPECCK
SFGVRKSLI IHHRSHTKERPYECAECEKSFNCHSGLIRHQMTHRGERPYKCSECEKTYSRKEHLQNHQRLHTGER
PFQCALCGKSFIRKQNLKQHRIHTGERPYTCGECGKSFRYKESLKDHLRVHSGGPGPGAPRQLPPPPERD

WO 2004/030615

PCT/US2003/028547

2659/6881
FIGURE 2446

TCTTGTCCCGGATTAAACAGGAGGAGCATCAGTGC GTGTGGGATCAGCAGGATTTGGCAGACAGAGATATTCCCA
CGGATCCCTCGGGAAGCGCCCAAAGGATTCCCCTTCACGTTGGTGCACCTGCTCCATAGCTCCGGGCGCTGCGTC
CCGAGGGGGCCACAGTCTCCATTTACAGCGTCTTGCATGGCCTGGCACC GGGTGGGGTGGTATGCCCCAGGACCCTT
GTTTGTGTCAAAAATGACTTTCCCTGCCCTTGCCGTGGGTCCGGCGTTCCCTCCCAGCCGGGATCACAGTGGGCAG
CCGGCACCCGGCACCACCTTTGGCGAGCGTCCTGCTTCCGCCCTCGCCCTCATCTACGCTGCTCCGCTTTCCTCAG
ACCCCTTTTGGCCGTGCAAAGGGAATTCTTGACATTAAATAAAAGGTATCCAGATTGCAGACTGCATGTTACAG
AGCTGGGGGTTCTCCAGCTTGCCCTACAGTAAAGCCTCAATGAACTGG

WO 2004/030615

PCT/US2003/028547

2660/6881
FIGURE 2447

AGTGCCTGCGCTTCTTCCAGCAGCGCAAGAGCCTGCTGCTGCACCAGCGCCTGCACACCGGCAATGGCCAGGGCT
GGCCCGCCTGCCCTACTGCGGCAAGGCCCTCCGCCGGCCCTCGGACCTCTTCCGGCACCAGCGCATCCACACCG
GTGAGCGGCCCTACCAGTGCCCCAGTGTTGGCCGGACCTTCAACCGCAACCACCACTGGCCGTGCACATGCAGA
CCCACGCCCCGAGGCCAGGTGGGCCACACTTCCCTGCCGCCCGCCCGCCACGGGAGCCTGCCCTGCCCTGGC
CCAGCCGAAGGAGGAGGGCTGACCTGGCAGGAGCCACAGAGGACCCCTGGCGGGGTCTCTCCCCTGTGCCTGA

CGCAGGTTCTTCCTTTTCTGGGATGGAGAGAGGTTTGTGTTTTTACCCATTCAAATGGGAAGCTAGCTGCCCT
TCTGGTGACATTGTGTGTGACCGGTGCTTCTGTTTCTGTTTGCACCTCTTCGCTGCCTTTTTCTGCATTCTCTGA
CTTCTAAAAGATGCCCTTAAGGCTTAAGGGATGCCATATTTTTGATAAGGCCTCTGGTAGGTACCACAGCCAAGAG
GACCAGAGATCATGGCCCTTCCAGTATGGGGCGATAGAGACATCGGGGACCTGGGATTTTTGTGTTTGTGCAGAG
ATCTCCTGCCTGCTGTCAACATGAGAAACAGTGGAGTGGAGTGGATGGATGGCCTGACTTGAAGAAAGGGCCCTG
GAAAGTTTTCTACTTTGCTATTTGAAATTTTTTCCCTTCTTATAGAGACTTTGAAATACTTTTTGTAAATGTGT
GTAGTTGTTAATGGAACCTTGCCTTTTGCAAAGTCGGAAGAGTCGGCTTTTTCCATGTGAGGCTCGCAGAGCTGA
AAGGGGAGCTACGTCCACCAGCCTGTGGGTCTTTTTGGTTTTTTTTTGTGTTGTTGTTGTTTTTTAAGATGGA
GTTTCACTCTTGTGTCAGGCTGGAGTGCAATGGTACAATCTCCGCTCACTGCAACCTCCGCCTCTCGGGTTCA
GGTGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCGCCACCACCACTCCCGGCTAATTTTTGTA
TTTTAGTAGAGACAGGGTTTCATCATGTTGTCCAGACTGGTCTCGAACTCCTGATGTTAGGTGACCCGCACACC
TCGGCCTCCTGAAGTGCTGGGATTACAGGCGTGAGCCACCACCTCTGGCCCAGCCTGTGGGTTTTGATGGGGATG
TCTTGGCTGCTGTCTTGGAGGCACAGTGTCTCCCCATGTGTGTGTTTCTTGGCCCAGAGTGAAGTCCAGTATTCC
TAGTCTTCCCCACAGGATAGTCACATCCATTATTTACTTTTGTGTGCTAGCTGGGAGGGGAACTGAAGCCTGGA
CACGTCTCCCCAAGGGCTCAGTGTTTCATGGGTGTGTAAGATCCATTGACTGGACCCAGAAAGCACCCCTGAGGGG
CAGTGCAGAGAGAGCCCAGGAAGCCCTCCACTAGAGGAGGCCCTTGGTCTGGCTGAGGACCACGTCCACCCTGG
GCCTCCAGGCCCTGCTTTTACATTAAAGGCGGGGAGTCTCCTCTCAAAGGAGTTCTCCCTTGAGCACTTTGGGC
TCTGGGGCAGAGTTGGGCTAGGAGATCTGGGTGAATCCTTTAGTCACAGCTAGTCTCATGTTCTCTCTGTCAA
AGGGGTGATGGCCCCAGTGTTGCTACCTCAGAGTTGTGAGGGTCAAAGTAACAGGCACTGGGACAAATATGAAG
CCTAGCTTTGTGCTTCTTTCAAATTCAGGGCCTCCTTTCTACTCCATTCCAGCCTTTTTTCTCTGTGAGATCC
CTCAGGAAGGACCTTTATCTTCTGGAGTGAGTGGCAGTTCCACTGGGTTTCAAGTGAAGAGTCCGCCATGGGGCTC
TGTTCCCCAGGAGTCCCTTTGTATTTTGGTGAACAAATCTTACCAAAGCATGAGATTCCGACTGTAGAAGTTTCA
ACTGCCTCAGTTCAGACTGCCTCATGGGGCAGTCTGGAGGTCAGCTGGCTTCTGGTGTCTCTCATCACACCCTG
CGGACGCTGTCTGTAGAGCAGCCTTGGTGTGGGTGACTCTGAAGCTGGAGTGATGGGACCCAGCTATCCTTGTT
TTTTACCGCCTTGTCTGGCACTGTGACCACGCTTCAGGGCTGCTTCTGGGGTCTTGGTCCCTGGATGTGCCATT
TCTTGGGAGGAGAGTGAGTATACAAGTCAGTGACAGTTTCCAGGCTCCCTTGGGTTTGGGAAGAGGCACTGC
CCTTCTGTGCTGTGGATCCTGCTTGTCTGCTCTGGAGTCCCCCACCCCTTGCCAGGAGCTTCACAAACCAGAGAC
GGGCTGTCAGCAAGAGCTCAGACAGGATGTGGTGCAAGTGCAGGTGCACGAGTTTAAACCCTCAGCTGCAGGAGCT
AGTCTCAGGTGTTCTGGGGATGCCTCAGGCTAAGAATTTTGCCGACTTCTGGGCTTGGTTGGCTAATGCCAAAT
GCCCTGCTTAAATATCACAAGGTGCTGATTCTCCTTTTTTCTTTTTTTCATACCAATGTGCTCAAACCTTTGAGC
TAGGTCTTGTGAGTTTGCTAGCACTCAGACCTGTTTAAAGTAACGTTCTTTACATTGAAACAAGTCAACCGAAGC
TTTGTGGTGACAGGAGCTGAGGGTGCCCCAGACTCAGTGGGAGCCCTGGTTGGGCCCCAACTCTCCAGCAGGGT
CCTCGGTTTCTCATTTGTGAAATAAATGAGTGGGCCACGACGTTAATAAGCCCAAGAGAAGTGTGAAGGTGGTA
GTCCCTTGCCCTAATTGGTGCTCAATAAAGTTGTTGGCAT

WO 2004/030615

PCT/US2003/028547

2661/6881
FIGURE 2448

MARAGPPAPTAARPSAGPRTSSGTSASTPVSGPTSAPSVAGPSTATTTWPCTCRPTPEARWAHTSLPPPPATGAC
PCPGPAGRRRADLAGAHRGPLAGSLPCA

WO 2004/030615

PCT/US2003/028547

2662/6881
FIGURE 2449

GCACGAGGCCAGCTTGGCCAGTGGCTCCGCAGGCTGCCGGCTCCACCCCTCAGGGACTGGCTGGCTTCGAGCAGG
GCATCGGAACCAGGCCTCCTGGCACTGGCCTGGGTAGAGCCAGGGCGAGCACCAGCTGACCCCACTGGGAACCCCT
GTGACAGTCCTGCCAGGGCCAGGCCATCCCAACCGACTTCCATCTCATGGACCCCTCCAGCGGAGAAGCCGGGAG
AGGCTGGCGGACTGCAGATCACACCCAGCTGCTGAAGTCACGCACAGGCGAGTTCTCCCTGGAGTCCATCCTGC
TACTGAAGCTGCGTGGCTTGGGACTGGCTGACCTGGGCTGCCTGGGAGAGTGCCTGGGCTGGAGTGGCTGGACC
TATCAGGCAACGCGCTCACCCACCTGGGCCCCTGGCCTCCTTGCGCCAGCTAGCTGTGCTCAATGTCTCCAACA
ATCGGCTGACGGGCCTGGAGCCACTGGCCACCTGTGAGAACTTGAGAGTCTCAATGCCGCAGGCAACCTACTGG
CCACCCCGGGCCAGCTGCAGTGTCTGGCTGGGCTACCGTGCCTGGAGTACCTGCGGCTCCGAGACCCCTTTGGCCC
GGCTCAGCAACCCGCTCTGTGCCAACCCCTCCTACTGGGCTGCAGTCCGGGAGCTGCTGCCTGGCCTGAAAGTCA
TCGACGGTGAGCGTGTGATTGGGCGTGGTAGTGAGTTCTACCAGCTGTGCCGAGACCTGGACAGCTCCTTGCGTC
CCAGCTCCAGTCCAGGCCCCAGAGCCACCGAGGCCCAGCCCTGGGTGGAGCCAGGCTACTGGGAGTCCCTGGCCCA
GCCGGAGCAGCTCCATCCTGGAGGAGGCCTGCCGGCAGTTCCAGGACACACTGCAGGAGTGTGGGACCTGGACC
GCCAGGCCAGCGACAGCCTGGCCCAGGCGGAGCAGGTACTCAGCTCTGCGGGCCCCACCTCTTCTTCGTCTTCT
GAACGTGGCCTATGGCCCAGGACAGCCTGGCAGGTGGCCTCGCTGCCCCCAGTTCCCTCTCTGCCCCCAGCTC
GTCTTAGTTGCTTACACTGGTCACTGGCCCTGCACACTGGGCTATTGCTTTATCCCTATCCTGAGAGCAGCCCC
TCCCCACCATCCCTCCACATGCTGCAAGGACAGACTGAAGGGCTGTGAGCAGGTGTAAGGGCTCCCACATCCGTG
AGCCTGTGTCCGCAGCTGCTGCCACTCTGGGCTGCTCCAGCCTGCAACTTAGTGGGAAGGAATTACTTCCTCCTGA
GGCTACAGGCGAGAAAGGTAGGGATGGGCCAGCCTCCCGTCTCAGCTGTTGGGAGACAGTAGGCAGGCTGAGTGG
CCCAGAGCACTCCTGGAAGTGGGACTCCCTGCCTTGCAAATGTGCCTCTCCAGACTGCTCCTGCACTTACCCCC
TCCCCGAGCACCTTCTCTGCCCGTTCTTGTCCACACATCTATTAAATGCTTCTGTTTTCAAAAAAAAAAAAAA
AAAAA

WO 2004/030615

PCT/US2003/028547

2663/6881
FIGURE 2450

MDPPAEKPGGEAGGLQITPQLLKSRGTGEFSLESILLKLRGLGLADLGCLGECLGLEWLDLSGNALHTLGPIASLR
QLAVLNVSNNRLTGLEPLATCENLQSLNAAGNLLATPGQLQCLAGLPCLEYLRRLRDPLARLSNPLCANPSYWAAV
RELLPGLKVIDGERVIGRGSEFYQLCRDLDSLRPSSSPGPRATEAQPWVEPGYWESWPSRSSSILEEACRQFQD
TLQECWDLDRQASDSLAQAEQVLSSAGPTSSFVF

WO 2004/030615

PCT/US2003/028547

2664/6881
FIGURE 2451

GGCAGGCACCAGCTGGGGAAGGCTGGTGTTCCTTGTTCGGCCACATTCTGGAGCCCGGCAGACAGCCTCAGCAAG
CTCCTGTAGCCCTTCCAGATGGTGGTCCGCGAGGCGAGTGCGGCACAGGCCTCTCTGAGCCAGGTGCTGCCCCAG
CTGCGCTACCTGCACATCTTCTGGAGCAGGTTTACACACACTTTTCAGGAGCAGAGTGTCTGGGGGAGAGGGGCGCA
GCCATCCAGCTGGCTGAGGGGTTGGCCCGGCAGCTCTGCACCGACTGTCTAGCTCAACAAGCTCTTCTACCGCGAG
GAGTTTGTGCTGGCCACCTTGTCTGGACCCCTTGCTTCAAGGGGAAGATTGAGGCCATCCTGCCATGGGGGCGGACC
GACATTGACCACTGGAAGCAAGTCCTCGTGTACAAGGTGAAGGAGATTAGAGTGTCTGAATACTCTTTGAACTCC
CCAAGTCCCCTGCAAAGCCCCAGGGGTCTGTGCGTGGACCCACCAGGGTAGCCAAGAGCTCCGGGGTGGAGGGG
AGAAGCCAGGGGGAGCCTCTGCAGAGCAGCAGCCACTCTGGGGCCTTCTCTGCTGGCCAGAGGGGAGAAGGGCTTG
CTGGAGAGCATGGGGCTGCTGGCCTCTGAGAGAAGCGGGGGCTCGCTGTCCACCAAGAGCCACTGGGGCCAGCATC
ATTGTCAAGAAGTATCTGTGGGAGAATGAGACCGTTGGAGCCCAGGATGACCCCTGGCTTACTGGGAGAAGAAG
CGAGAAGCCTGGGCACCATCTATCTGTCTTACCCCCACAGGAGCCTTCTCTGAAAGCATCTTTGCCTCCCTGAA
CAGCCCCACCCTTGTAGAGCAAACTCTTCTCTCAAGGTGGAAGCCATTGAGCATCTCTCTTCTTGAAGGCCAA
CCTGGAGCAGTTCCCCAACTACACCCCGCCTCCCCTCACTGCTCTAGTGGTGACCTGGCCAAGGGGATACAGAC
CCTGCAGTCCGCTCAGGGTGGGATGGCAGACATGGCAGGTGCCGGTGCTCACCTGCCCCGTGAACCTCTAGAGAG
CCCCTGCCTGTAATAGGTCAAAGCAGAGAGCTGGGTGTTGCATCCTGGGCGCCACATGCTCATGGCCAGAATCTT
AAACCTATTGGTAGGAAAGGGTCAGTTTCTCACTTGACAGATTGCCATATTTTTTTTCTGGGAGATGTCAATTT
TCCATCTCCCGATTACTTCCCTTACGTCTAGCAGTATGTGCCGAGAAGAGGGCTTACTCTCTTCGTAGGTGACTGT
GAATTTTGTACTACGTGGCTTTGTACATGTGATGCTCTGTTAAACATAAGTGGGTATGAAGGTCCTTGCATACA
CCTTGTCTGTGTGGATAAGTGGACACATGCCCTTAAAGAGGCTTGCTTCTCAAAAAGTGGCCAAGGATGTGGAGT
GGGCATGTGCTGGCAGGTGGGATATGTCTCAGCCTTTGGGGGCTGGATAAGCTATTGCAGCACTTTCTGAGGC
TTTCACTGTAGGGAGAAGGAAACCCCAAGGGTAGAATAGCCATTTCCAGAGGGAAGTACACACATAACCCACAC
ACCAGTCTTTTGGGGGTTTCAGAGTGGCCGGAGAAACCGACTGAAGGGACTGACCAGCTAGCTAGGAGAGCTGA
GACGCCAGTCCCTCAAATGGCGTTCTTACCAATAGTCTATTTCCAGACTACTGGAACGTTGGGGTTTCTTCTCCTCC
AGTGACAGCAGCCTCAGTAGCTTTCCTGGGCTCCAGGCGGCTGGCTGCACACCCTGCCTGCCATCACCTTGCCC
CTGCTTGTCTTGACCACTTTTAAAGGGGAAGTCCCTTATTTGGAAGAGAGAAAGGATGTGTGTAGCACACACTC
ATCATGGATTGCTCAGAGTTCCTTTAGGGCAGAGCTGAGGGCCTGGGATCCAGGAACCAAGTGGGATTGGATGGGA
AGGGTGGCTGCTGAGATGCAGGTCGGAAGAGGCAGGGGAAGGCTCCAGGCCTAACTTGGAGCATGTCACTGGCCA
TGGGGGTGAGGGGACAGACTCTGCTCTCACTGGCTGGCAGCCCCAGGAGCCTGTTCCTTGCCTCTCCTGGATGG
GTTGTCAGCCCTGTGTTTCACTGTGACCAATTCATTATAACATTTGGATATTACTGAAAATGTAAGGAAGCAGGA
AAAATTAATACTTTTCACTCAGAGATAGCCTCTATCAATAGTTTGACATTTTCCCTCTTTTACATTGAGATCAT
ACCCTAGGTACTGTTTAGTATGCAATATTTTCATTTTCGCAGTATAATAATTGCACCTGTAAATAAAGTTTGT
AAACATTTAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2665/6881
FIGURE 2452

MVVREASAAQASLSQVLPQLRYLHIFLEQVHTHFQEQSVGERGAAIQLAEGLARQLCTDCQLNKL FYREEFVLAT
LLDPCFKGKIEAILPWGPTDIDHWKQVLVYKVKEIRVSEYSLNSPSP LQSPRGLCVDPTRVAKSSGVEGRSQGEP
LQSSSHSGAFLLAQREKGLLESMGLLASERSGGSLSTKSHWASII VKKYLWENETVGAQDDPLAYWEKKREAWPP
SICLTPHRSL

WO 2004/030615

PCT/US2003/028547

2666/6881
FIGURE 2453

CTTGAAATGTTATCTAAAAACCCAAGATTGAAATAATACATACCACACAAGGAAACAGGAGAGTAGTCTAGCTCC
ATGTCCGGGGCTCTAGGGGTTTCATAGATGGCAGCTCCTGTCCGGGGCTGAGGTTGGGAGGGGAGAAACAGGGGCA
GAGTGAGTTGGTCTCTGGAGTGACTGTGCTTTTCCACCCTCAGCAGAGGAAGAACCAGATGCTGGAACGTCGTTGC
AGGGGCCCCCTGGCCATGGGCCTGGCCCAGCCCCGACTCCTTTCTGGGCCCTCCCAGGAGTCACCCCAGACCCCTG
GGGAAGGAGTCCCGCGGGCTGAGGCAACAAGGCACGTCACTGGGCCAGTCTGGTGCCCAAGCCCCAGGCAGGGCC
CATCGCTGTGCCCCTGTGCAAGGCACCTTCCCTGGCTGGGTGGCTCTGTGGCTTCACACCCGCCGGTGCCAGGCC
CGGCTGCCCTTGCCCTGCCCTGAGTGTGGCCGTGCTTTCCGCAATGCCCCCTTCTTAGCACTGCACCGCCAGGTC
CATGCTGCTGCCACCCAGACCTGGGCTTTGCCTGCCACCTCTGTGGGCAGAGCTTCCGAGGCTGGGTGGCCCTG
GTTCTGCATCTGCGGGCCATTGAGCTGCAAAGCGGCCCATCGCTTGTCCCAAATGCGAGAGACGCTTCTGGCGA
CGAAAGCAGCTTCGAGCTCATCTGCGGCGGTGCCACCCCTCCCGCCCCGAGGCCCGGCCCTTCATATGCGGCAAC
TGTGGCCGGAGCTTTGCCAGTGGGACCAGCTAGTTGCCACACAAGCGGTGCACGTAGCTGAGGCCCTGGAGGAG
GCCCGAGCCAAGGCTCTGGGGCCCCGGGCCAGGGGCCGCCCGCGGTGACCGCCCCCGGCCCGGTGGAGATGCC
GTCGACCGCCCCCTTCCAGTGTGCTGTTGTGGCAAGCGCTTCCGGCACAAAGCCCAACTTGATCGCTCACCGCCGC
GTGCACACGGGCGAGCGGCCCCACCAGTGCCCCGAGTGCGGGAAGCGCTTACCAATAAGCCCTATCTGACTTCG
CACCGGCGCATCCACACCGGCGAGAAGCCCTACCCGTGCAAAGAGTGCGGCCGCCGCTTCCGGCACAAACCCAAC
CTGCTGTCTCACAGCAAGATTACAAAGCGATCCGAGGGTTCGGGCCAGGCCGCCCGGCCCGGGGAGCCCCCAG
CTGCCAGCCGGCCCCCAGGAGTCCGCGGCCGAGCCCACCCGGCGGTACCTCTGAAACCGGCCCAGGAGCCGCCG
CCAGGGGCCCGCCAGAGCACCCGAGGACCCGATCGAAGCCCCCCCCCTCCCTCTACAGCTGCGACGACTGCGGC
AGGAGCTTCCGGCTGGAGCGCTTCCCTGCGGGGCCACCAGCGGCAGCACACCGGGGAGCGGCCCTTCACTGCGCC
GAGTGCGGGAAGAATTCGGCAAGAAGACGCACCTGGTGGCGCACTCGCGCGTGCACTCCGGCGAGCGGCCCTTC
GCCTGCGAGGAGTGCGGCCGCCGCTTCTCCAGGGCAGCCATCTGGCGGCGCATCGGCGGACACGCCCCCGAT
CGGCCCTTCGTGTGTCCGACTGCGGCAAGGCCCTTCCGCCACAAACCTTACCTGGCGGCGCACCGGCGCATCCAC
ACCGGCGAGAAGCCCTACGTCTGCCCCGACTGCGGCAAGCCCTTACGCCAGAAGTCCAACCTGGTGTGCAACCGG
CGCATCCACACGGGCGAGCGGCCCTACGCCCTGTCCGACTGCGACCGCAGCTTCAGCCAGAAGTCCAACCTCATC
ACCCACCGCAAGAGCCACATCCGGGACGGCGCCTTCTGCTGTGCCATCTGTGGCCAGACCTTCGACGACGAGGAG
AGACTCCTGGCCACCAGAAGAAGCACGATGTCTGAGACGGTGGGCGGGGCCGTGTTGGCTGAGAGAGGGCTGGG
GTCCTTCGTGGTGGGAGTCGAGTGGGCTGGGGGTGCCTGCCTAGTGCTGGAGTAGGGGACAATGGGAATCCTAG
AGGGGATGGAAGACGCGGGGAGTGAGCTGGGTGGGCCCTGCTAGCGAGAGAGGTCAACCCCGGTGGCCAGGGAAC
CCACTTCCAAGCGCAGGGACGCCGGCCTCCAGCTGGTGTGTGCTAAGGCTCCGTCCTGACTGCCCTGTGCCCTGG
AAAAGCAGCAATAGCATCCGCCCTTAGAGCCCTCTGGCTAGAGGAGCCACCAGTGGAAGGAAGACCCCTCCATC
CTCTGGTATTAACGCCTTAATGCCCTGTCTTTTACTGTAAGTTACTTAAGATCATTTTGGGAAGCAGGCGTGCT
AGAGTCTGTAAATGAATGCTCTGGGCTAGATACAGCTTGGAGAACCTGCTGGCCTTGTTAGACAGCACTTGGGC
CTTTGCCAGCAGCAAGAGGTGAAGCGAAGCCACTTACCTCTCCCTTCCCTTCCACCTGCCCCCTGCGTAGGC
ACCCAGACTTGGAGAGACCCGTCTGCTGTTAATACTTCCATCCTCTTCCCTTCCCAAGAGCAGATCCCAAGGCAT
TTACTCCTTGGTCTGTCTCGCTTATCTGTGCCCCCTCCAGCGCTGAGAGCCTCCCTGGCTGTGACGAGCACT
GTGTCCAGGCTCTTGTCTGAACACCGCAGCCCCCTCTCGCTCCTTCCAGAGCTCAGCATGTACGGCAAGGACT
GCCGCATTGGTGATGGAGGGCCAGCTGAGGGGAAGTTGCTGGTGAGTTTCCCTTTTCTCCATTTCTAGCATATGGA
CACCTGGCCTCTGCTTGAGCACTTAGGTGACAGGAACCTCCGCACCTCCTGAGGCCCTGGATGATTCTAATTGTT
AGAAATTCTAATTGTTAGAAATCCTTCCCTTATAATGAATGAATTTCTGCTTTCTTATAATTCTACCTATTGGGCC
TTGTTCTGTTCTCTGGAACATAACAGAACCAACATTTACCCCTCCTTTTCAAACCTAGAGAATAAAGATTTGGTTT
TAG

WO 2004/030615

PCT/US2003/028547

2667/6881
FIGURE 2454A

GGGGAGCCGGGAGCCGAGCGAGGACCCGGCGCCCGCAGTCCAGTCTTGCCCGCGCCCGTGCTCGGCTTGCCCGCG
GGGTGCGGGGACACGGCCCCGGCCGGGCCACCCGAAGCCTAGTGCTGGGCCGGGCCGGGGTGGGTGGGGG
CCCCCCCCGGCCCCGCCATGGGCTCAGGATGCCGGTGCGGAGGGGGCCACGTCGCGCCGCAGAACACCTTCCTGGAC
ACCATCATCCGCAAGTTTTGAGGGCCAGAGCCGTAAGTTCATCATCGCCAACGCTCGGGTGAGAACTGCGCCGTC
ATCTACTGCAACGACGGCTTCTGCGAGCTGTGCGGCTACTCGCGGGCCGAGGTGATGCAGCGACCCTGCACCTGC
GACTTCCTGCACGGGCCGCGCACGCGCGCCGCTGCCGCGCAGATCGCGCAGGCACTGCTGGGCGCCGAGGAG
CGCAAAGTGGAATCGCCTTCTACCGGAAAGATGGGAGCTGCTTCCTATGCTGCTGGTGGATGTGGTGCCCGTGAAG
AACGAGGATGGGGCTGTTCATCATGTTTCATCCTCAATTCGAGGTGGTGTGAGAAAGGACATGGTGGGGTCCCCG
GCTCATGACACCAACCACCGGGGCCCCCCCCACCAGCTGGCTGGCCCCAGGCCGCGCCAAGACCTTCGCGCTGAAG
CTGCCCGCGCTGCTGGCGCTGACGGCCCGGGAGTCGTGGTGCGGTCGGGCGGCGGGGCGGCGGGGCGCCCCG
GGGGCCGTGGTGGTGGACGTGGACCTGACGCGCGCGGCACCCAGCAGCGAGTCGCTGGCCCTGGACGAAGTGACA
GCCATGGACAACCACGTGGCAGGGCTCGGGCCCGCGGAGGAGCGGCGTGCGCTGGTGGGTCCCGGCTCTCCGCCC
CGCAGCGCGCCCGGCCAGCTCCCATCGCCCCGGGCGCACAGCCTCAACCCCGACGCTCGGGCTCCAGCTGCAGC
CTGGCCCGGACGCGCTCCCGAGAAAGCTGCGCCAGCGTGCGCCGCGCCTCGTCGGCCGACGACATCGAGGCCATG
CGCGCCGGGTGCTGCCCCCGCCACCGCGCCACGCCAGCACCGGGGCCATGCACCCACTGCGCAGCGGCTTGCTC
AACTCCACCTCGGACTCCGACCTCGTGCGCTACCGCACCATTAGCAAGATTCCCCAAATCACCTCAACTTTGTG
GACCTCAAGGGCGACCCCTTCTTGGCTTCGCCCCACAGTGACCGTGAGATCATAGCACCTAAGATAAAGGAGCGA
ACCCACAATGTCACTGAGAAGGTACCCAGGTCTGTCCCTGGGCGCCGACGTGCTGCCTGAGTACAAGCTGCAG
GCACCGCGCATCCACCGCTGGACCATCTGCATTACAGCCCCCTCAAGGCCGTGTGGGACTGGCTCATCCTGCTG
CTGGTCACTACACGGCTGTCTTACACCCTACTCGGCTGCCTTCTGCTGAAGGAGACGGAAGAAGGCCCGCCT
GCTACCGAGTGTGGCTACGCCCTGCCAGCCGTGGCTGTGGTGGACCTCATCGTGACATCATGTTTCATTGTGGAC
ATCCTCATCAACTTCGCGACCACTACGTCAATGCCAACGAGGAGGTGGTCAGCCACCCCGCCGCATCGCCGTC
CACTACTTCAAGGGCTGGTTCTCATCGACATGGTGGCCGCCATCCCCTTCGACCTGCTCATCTTCGGCTCTGGC
TCTGAGGAGCTGATCGGGCTGCTGAAGACTGCGCGGCTGCTGCGGCTGGTGCGCGTGCGCGGGAAGCTGGATCGC
TACTCAGAGTACGGCGCGGCCGTGCTGTTCTTGCTCATGTGACCTTTGCGCTCATCGCGCACTGGCTAGCCTGC
ATCTGGTACGCCATCGGCAACATGGAGCAGCCACACATGGACTCAGCATCGGCTGGCTGCACAACCTGGGCGAC
CAGATAGGCAAACCTACAACAGCAGCGGCTGGGCGGCCCTCCATCAAGGACAAGTATGACACGGCGCTCTAC
TTCACCTTCAGCAGCCTACCAAGTGTGGGCTTCGGCAACGCTCTCTCCCAACCACTCAGAGAAGATCTTCTCC
ATCTGCGTCATGCTCATTGGCTCCCTCATGTATGCTAGCATCTTCGGCAACGCTGTCGGCCATCATCCAGCGGCTG
TACTCGGGCACAGCCCGCTACCAACACACAGATGCTGCGGGTGCGGGAGTTTCATCCGCTTCCACCAGATCCCCAAT
CCCCCTGCGCCAGCGCCTCGAGGAGTACTTCCAGCACGCTGGTCTTACACCAACGGCATCGACATGAACCGGGTG
CTGAAGGGCTTCCCTGAGTGCCTGCAGGCTGACATCTGCCTGCACCTGAACCGCTCACTGCTGCAGCACTGCAAA
CCCTTCCGAGGGGGCCACCAAGGGCTGCCTTCCGGGCCCTGGCCATGAAGTTCAAGACCACACATGCACCGCCAGGG
GACACACTGGTGCATGCTGGGGACCTGCTCACCGCCCTGTACTTCATCTCCCGGGGCTCCATCGAGATCCTGCGG
GGCGACGTGCTCGTGCCATCCTGGGGAAGAATGACATCTTTGGGGAGCCTCTGAACCTGTATGAAGGCCTGGC
AAGTCGAACGGGGATGTGCGGGCCCTCACCTACTGTGACCTACACAAGATCCATCGGGACGACCTGCTGGAGGTG
CTGGACATGTACCCTGAGTTCTCCGACCACTTCTGGTCCAGCCTGGAGATCACCTTCAACCTGCGAGATACCAAC
ATGATCCCGGGCTCCCCCGGCAGTACGGAGTTAGAGGGTGGCTTCAGTCGGCAACGCAAGCGCAAGTTGTCTTTC
CGCAGGCGCACGGACAAGGACACGGAGCAGCCAGGGGAGGTGTGCGCCTTGGGGCCGGGCCGGGGGCGAGGG
CCGAGTAGCCGGGGCCGGCCGGGGGGGGCGTGGGGGGAGAGCCGTCAGTGCGCCCTCCAGCCCTGAGAGCAGT
GAGGATGAGGGCCAGGCCGAGCTCCAGCCCCCTCCGCTGGTGGCTTCTCCAGCCCCAGGCCCCCCGGAGAG
CCGCCGGGTGGGGAGCCCTGATGGAGGACTGCGAGAAGAGCAGCGACACTTGCAACCCCTGTGAGGCGCCTTC
TCAGGAGTGTCCAACATTTTCAGCTTCTGGGGGGACAGTCGGGGCCGCCAGTACCAGGAGCTCCCTCGATGCCCC
GCCCCACCCCCAGCCTCCTCAACATCCCCCTCTCCAGCCCGGGTTCGGCGGCCCGGGGGCGACGTGGAGAGCAGG
CTGGATGCCCTCCAGCGCCAGCTCAACAGGCTGGAGACCCGGCTGAGTGCAGACATGGCCACTGTCCTGCAGCTG
CTACAGAGGCAGATGACGCTGGTCCCGCCCGCTACAGTGTGTGACCACCCCGGGGCTGGCCCCACTTCCACA
TCCCCGCTGTTGCCGCTCAGCCCCCTCCCCACCTTCACTTGGACTCGCTTTCTCAGGTTTCCAGTTTCATGGCG
TGTGAGGAGCTGCCCCCGGGGGCCCCAGAGCTTCCCCAAGAAGGCCCCACACGACGCCTCTCCCTACCGGGCCAG

WO 2004/030615

PCT/US2003/028547

2668/6881
FIGURE 2454B

CTGGGGGCCCTCACCTCCCAGCCCCTGCACAGACACGGCTCGGACCCGGGCAGTTAGTGGGGCTGCCCAGTGTGG
ACACGTGGCTCACCAGGGATCAAGGCGCTGCTGGGCGCTCCCCTTGGAGGCCCTGCTCAGGAGGCCCTGACCG
TGGAAGGGGAGAGGAACTCGAAAGCACAGCTCCTCCCCAGCCCCTTGGGACCATCTTCTCCTGCAGTCCCCTGGG
CCCCAGTGAGAGGGGCAGGGGCAGGGCCGGCAGTAGGTGGGGCCTGTGGTCCCCCCTGCCCCTGAGGGCATTAG
CTGGTCTAACTGCCCGGAGGCACCCGGCCCTGGGGCCTTAGGCACCTCAAGGACTTTTCTGCTATTTACTGCTCTT
ATTGTTAAGGATAATAATTAAGGATCATATGAATAATTAATGAAGATGCTGATGACTATGAATAATAATAATTA
TCCTGAGGAGA

PCT/US2003/028547

FIGURE 2455A

AGTCCAGAGCGAGCGGGTTATGCCTCCGCTCGTTGCCCTGAAAGCCGACGACAGCGAAAAGGGCTAAGATT
GGCCATGAGCAGCGCCCCCTCGGCGCCCCGCCAAGGGCGCAGATTCTTTCTGTACGCCAGAGCCAGAGAGCTTGGG
CCCTGGGACGCCTGGGTTCCCCGAGCAGGAGGAAGACGAACCTTACCACCCCTGGGCGTGGAGCGGTTTGAGGA
GATCTTACAGGAGGCCGGGTCTCGTGGAGGGGAGGAGCCAGGCCGAGCTATGGGGAGGAAGACTTTGAGTACCA
CCGCCAGTCTCTCCACCACATCCATCACCCACTGTCCACCACCTGCCTCCGGATGCACGCCGCCGAAGACACC
CCAGGGCCCCAGGACGGAAGCCTCGAAGGCGCCCGGGAGCCTCCCCGACTGGAGAAAACCCGACCATTGAGGAGGG
GGAGGAAGATGAGGATGAGGCCAGCGAGGCTGAGGGGGCCCCGGGCTCTCACTCAGCCGTCCCCTGTCTCCACACC
CTCCTCGGTGCAGTTCTTTCTCCAAGAGGATGACAGTGCTGACCGGAAGGCAGAGAGGACCAGTCCATCTTCCCC
TGCACCACTGCCCCACCAGGAGGCGACTCCTCGGGCCTCAAAGGGGGCCAGGCTGGAACCCAGGTGGAGGAGGG
GGAGGCGGAGGCGGTGGCGGTGGCCAGTGGCACTGCAGGGGGTGACGACGGGGGTGCCTCGGGGCGCCCCCTGCC
CAAAGCCCAGCCTGGGCACCGCAGCTACAACCTTCAAGAGAGGAGGGCGCATCGGGAGCATGACTGGGGCTGAGCA
GGCACTGCTGCCCCGGGTCCCCACGGATGAGATTGAGGCCCAGACGCTGGCCACGGCCGACCTAGACCTCATGAA
GAGTACCCGTTTTGAGGACGTTTCTGGGGTGCGGCGGCACCTTGGTGCGGAAGAATGCCAAAGGTTCCACACAGAG
TGGCCGAGAAGGGCGGGAGCCTGGCCCCACACCTCGGGCCCCGACCCCGGGCCCCCAACAAGCCCCATGAGGTGTT
TGTGGAGCTGAATGAGTTGCTCCTGGACAAAAACCAGGAGCCCCAGTGGCGGGAGACAGCTCGCTGGATCAAAAT
TGAAGAGGACGTGGAGGAGGAGACTGAGCGCTGGGGGAAGCCCCACGTGGCCTCCCTCTCTTCCGAGTCTCCT
GGAGCTCCGCGAGGACCTTGGCCCATGGGGCTGTGCTCTTGGATCTGGACCAGCAGACCCTGCCCGGAGTGGCCCA
CCAGGTGGTGGAGCAGATGGTCATCTCTGACCAGATCAAGGCCGAGGACAGGGCCAACGTGCTGCGGGCTCTGCT
GTTGAAACACAGCCACCCAAGTGATGAGAAGGACTTCTCCTTCCCCGCAACATCTCAGCTGGCTCCCTGGGCTC
CCTGCTGGGGCATCACCATGGTCAGGGGGCTGAGAGTGACCCCCACGTACCGAGCCTCTCATGGGAGGTGTTCC
TGAGACCCGGCTGGAGGTGGAGCGAGAGCGTGAGCTGCCGCCTCCAGCACCACCAGCTGGCATCACCCGCTCCAA
GTCCAAGCACGAGCTGAAACTGCTGGAGAAGATTCTGAGAATGCCGAGGCCACGGTGGTCTTGTGGGGCTGCGT
GGAGTTCTCTCTCCGCCCCACCATGGCCTTTGTGCGGCTCCGGGAGGCTGTGGAGTTGGACGCAGTGTGGAGGT
GCCGGTGCCTGTGCGTTTTCTCTTCTGCTGCTGGGCCCGAGTAGTGCCAACATGGACTACCACGAGATCGGCCG
CTCCATCTCCACCCTCATGTGACACAAGCAATTCCACGAGGCAGCCTACCTGGCTGACGAGCGGGAGGACCTGCT
GACGGCCATCAACGCCTTCTTGGACTGCAGCGTGGTGCTGCCGCCTTCAGAAGTGACAGGGCGAGGAGCTGCTGCG
CTCTGTGGCCCCACTTCCAGCGCCAGATGCTCAAGAAGCGAGAGGAGCAGGGCCGGGCTGCTACCTACAGGGGGCTGG
GCTGGAGCCCAATCTGCCCAAGATAAGGCGCTCCTGCAGATGGTAGAGGGCGGCAGGGGCGAGCTGAAGATGATCC
CCTTCGGCGGACGGGGCGGGCCCTTTGGGGGGCTGATCCGAGATGTGCGGCGCCGCTATCCCCACTACCTGAGTGA
CTTCCGAGATGCATTGACCCTCAGTGCCTGGCCGAGTCATCTTCACTACTTTGCCGCCCTGTCTCTTGCCAT
CACCTTTGGGGGGCTGCTGGGAGAGAAGACGCAGGACCTGATAGGGGTGTGGAGCTGATTATGTCCACAGCGCT
CCAGGGCGTGGTCTTCTGCCTGCTGGGTGCCAGCCCCGTGTTGGTGATCGGCTTCTCAGGGCCCCCTGCTGGTCTT
TGAGGAGGCCTTCTTCTCGTTCTGTAGCAGCAACCACCTGGAGTACCTGGTGGGCCGTGTGTGGATCGGCTTCTG
GCTGGTGTCTCTGGCCCTGCTCATGGTGGCCCTGGAGGGGAGCTTCTGGTCCGCTTCGTCTCCCGCTTACCCA
GGAGATCTTCGCCCTTCTTGATCTCACTCATCTTCACTATGAGACCTTCTACAAGCTGGTGAAGATCTTCCAGGA
GCACCCCTGCATGGCTGCTCAGCTTCAAACAGCTCAGAGGTGGACGGCGGTGAGAACATGACATGGGCCGGGGC
AAGACCCACGCTGGGGCCGGGCAACAGGAGCTTGGCTGGGCAGTCTGGGCAGGGGAAGCCCCGGGGCCAGCCCAA
CACGGCCCTGCTGTGCTGGTGCTCATGGCCGGCACCTTCTTATCGCCTTCTTCTGCGCAAATTCAGAACAG
CCGTTCTTTCTGGCCGGATCCGGCGGGTGATTGGGGACTTTGGGGTGCCCATCGCCATCCTCATCATGGTGCT
TGTGGATTACAGTATTGAGGACACCTATACCAGAAGCTGAGCGTTCCAGTGGATTCTCGGTGACTGCCCCAGA
AAAGAGGGCTGGGTGATCAACCCCTGGGAGAGAAGAGCCCTTCCCTGTGTGGATGATGGTTGCCAGCCTGCT
GCCCGCCATCCTGGTCTTCACTTCTCATCTTCAATGGAGACAGATCACCACGCTCATCATCTCCAAGAAGGAGCG
CATGCTGCAGAAGGGCTCCGGCTTCCACCTGGACCTGCTGCTCATCGTGGCCATGGGCGGCATCTGTGCCCTCTT
TGGCTTCCCTGGTTGGCTGCTGCCACTGTCCGCTCTGTCACTCAGCCAACGCGCTCACTGTCAATGAGCAAGGC
TGTGGCACCTGGGGACAAGCCCAAGATTCAAGAACTCAGGAGCAGCGGCTGACGGGGCTGCTGGTTCCTGCTGCT
TGTGGGCTCTCCATAGTTATCGGGATCTGCTCCGCGAGATCCCCCTGCGCGTGTCTTTGGAATTTTCTGTA
CATGGGAGTCACCTCCCTTAACGGGATCCAGTTCTATGAGCGGCTGCATCTGCTGCTCATGCCGCCAAACACCA
CCCAGATGTCACCTTACGTCAAGAAGGTCCGGACCCCTCCGTATGCACCTGTTTACGGCCCTGCAGCTGCTCTGCCCT

WO 2004/030615

PCT/US2003/028547

2670/6881
FIGURE 2455B

GGCCCTGCTCTGGGCCGTCATGTCCACAGCTGCCTCCCTGGCCCTTCCCCCTTCATCCTCATCCTCACAGTGCCGCT
CCGCATGGTGGTGCTCACCCGTATCTTCACCGACCGAGAGATGAAATGTCCTGGATGCTAACGAGGCAGAGCCGGT
GTTTGATGAGCGGGAGGGTGTGGACGAGTACAATGAGATGCCCATGCCTGTGTAGCCGCCACCGAGGGACAGCCG
AGGGACCGATGGACGAGGGGACAGGCTGGTGGGATGGGGTTCCCCCTCCCATGCCCCCTCCCTCCTTTTTATTAA
GTGAATAATTTAAAGTCTTCTCCTCCCCACTGCCCTGCAGTAAAGTGCTTTGGCCCCCA

WO 2004/030615

PCT/US2003/028547

2671/6881
FIGURE 2456

GCGGCGGCGGGGAAGGAGGGGTGCTTCAGGTGCCTGCGACCTCCGCGCCTCCCGCCCGGAAGTGCCCGAGGGGCC
GCGATGGAGCTGGGGGAGCCGGGCGCTCGGTAGCGCGGCGGGCAAGGCAGGCGCCATGACCCCTGATTGAAGGGGT
GGGTGATGAGGTGACCGTCCTTTTCTCGGTGCTTGCCCTGCCCTTCTGGTGCTGGCCCTTGCCCTGGGTCTCAACGCA
CACCGCTGAGGGCGGGGACCCACTGCCCCAGCCGTGAGGACCCCAACGCCATCCCAGCCCAGCGCAGCCATGGC
AGCTACCGACAGCATGAGAGGGGAGGCCCCAGGGGCAGAGACCCCGCCTGAGACACAGAGGTCAAGCTGCACA
GCCAGAGCCCAGCACGGGGTTACAGCAACACCGCCAGCCCCGGACTCCCCGCAGGAGCCCCCTCGTGCTACGGCT
GAAATTCTCAATGATTGAGAGCAGGTGGCCAGGGCCTGGCCCCACGACACCATTTGGCTCCTTGAAAAGGACCCA
GTTTCCCGGCCGGGAACAGCAGGTGCGACTCATCTACCAAGGGCAGCTGCTAGGCGACGACACCCAGACCCTGGG
CAGCCTTACCTCCCTCCCAACTGCGTTCTCCACTGCCACGTGTCCACGAGAGTCGGTCCCCCAAATCCCCCCTG
CCCGCCGGGGTCCGAGCCCGGCCCCCTCCGGGCTGGAAATCGGCAGCCTGCTGCTGCCCCCTGCTGCTCCTGCTGTT
GCTGCTGCTCTGGTACTGCCAGATCCAGTACCGGCCCTTCTTTCCCTGACCGCCACTCTGGGCCTGGCCGGCTT
CACCTGCTCCTCAGTCTCCTGGCCTTTGCCATGTACCGCCCGTAGTGCCTCCGCGGGCGCTTGGCAGCGTCGCC
GGCCCCCTCCGGACCTTGCTCCCCGCGCCGCGGCGGGAGCTGCTGCCTGCCAGGCCCGCCTCTCCGGCCTGCCTC
TTCCCGCCGCCCTGGAGCCCAGCCCTGCGCCGAGAGGACTCCCGGGACTGGCGGAGGCCCCCGCCTGCGACCGC
CGGGGCTCGGGGCCACCTCCCGGGGCTGCTGACCCTCAGCCCGCACTGGGAGTGGGCTCCTCGGGGTGCGGCATC
TGCTGTGCTGCCTCGGCCCCGGGCAGAGCCGGGCGCCCCGGGGGCCCGTCTTAGTGTTCTGCCGGAGGACCCA
GCCGCCTCCAATCCCTGACAGCTCCTTGGGCTGAGTTGGGGACGCCAGGTGGTGGGAGGCTGGTGAAGGGGAGC
GGGGAGGGGCAGAGGAGTTCCCCGGAACCGTGAGATTAAAGTAACTGTGAAGTTTTCAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2672/6881
FIGURE 2457

MTLIEGVGDEVTVLFSVLACLLVLALAWVSTHTAEGGDPLPQPSTGTPPSQPSAAMAATDSMRGEAPGAETPSLR
HRGQAAQPEPSTGFTATPPAPDSPQEPLVLRLLKFLNDSEQVARAWPHDTIGSLKRTQFFGREQQVRLIYQGQILG
DDTQTLGSLHLPPNCVLHCHVSTRVGPPNPPCPPGSEPGPSGLEIGSILLPLLLLLLLLLLLWYCQIQYRPFPLTA
TLGLAGFTLLLSLLAFAMYRP

WO 2004/030615

PCT/US2003/028547

2673/6881
FIGURE 2458

CCCAGCTCCCTGAAACAACAGTAACCTACCCCTGTGGGTTCATCATCATGCCCCTCCGACCTGGCCAAGAAGAAGGC
AGCCAAAAAGAAGGAGGCTGCCAAAGCTCGACAGCGGCCAGAAAAGGACATGAAGAAAATGGAGATGTTGTCAC
AGAACCACAGGTGGCAGAGAAGAATGAGGCCAATGGCAGAGAGACCACAGAAGTAGATTGCTGACCAAGGAGCT
AGAGGACTTTGAGATGAAGAAAGCTGCTGCTCGAGCTGTCACTGGCGTCTCTGGCCTCTCACCCCAACAGTACTGA
TGTTTCACATCATCAACCTCTCACTCACCTTTTCATGGTCAAGAGCTGCTCAGTGACACCAAACTGGAATTAACTC
AGGCCGTGCTTATGGCCTCATTTGGTTTAAATGGAATTGGAAAGTCCATGCTGCTCTCTGCTATTGGGAAGCGTGA
AGTGCCCATCCCTGAGCACATCGACATCTACCATCTGACTCGAGAGATGCCCCCTAGTGACAAGACACCCCTTGCA
TTGTGTGATGGAAGTCGACACAGAGCGGGCCATGCTGGAGAAAAGAGGCAGAGCGGCTGGCTCATGAGGATGCGGA
GTGTGAGAAGCTCATGGAGCTCTACGAGCGCCTGGAGGAGCTGGATGCCGACAAGGCAGAGATGAGGGCCTCGCG
GATCTTGATGGAGTGGGTTTACACCTGCCATGCAGCGCAAGAAGCTAAAAGACTTCAGTGGGGGCTGGAGGAT
GAGGGTTGCCCTTGCCAGAGCCCTCTTTATTCGGCCCTTCATGCTGCTCCTGGATGAGCCTACCAACCACCTGGA
CCTAGATGCTTGCGTGTGGTTGGAAGAAGAACTAAAACTTTTAAGCGCATCTTGGTCCCTCGTCTCCCATTTCCCA
GGATTTTCTGAATGGTGTCTGTACCAATATCATTACATGCACAACAAGAACTGAAGTATTATACGGGTAAATTA
TGATCAGTATGTGAAGACGCGGCTAGAGCTGGAGGAGAACCAGATGAAGAGGTTTCACTGGGAGCAAGATCAGAT
TGCACACATGAAGAACTACATTGCGAGGTTTGGTCATGGCAGTGCCAAGCTGGCCCGGCAGGCCAGAGCAAGGA
GAAGACGCTACAGAAAATGATGGCATCAGGACTGACAGAGAGGGTCGTGAGCGATAAGACACTGTCATTTTATTT
CCCACCATGTGGCAAGATCCCTCCACCTGTCATTATGGTGCAAAATGTGAGCTTCAAGTATACAAAAGATGGGCC
TTGCATCTACAATAATCTAGAATTTGGAATTGACCTTGACACACGAGTGGCTCTGGTAGGGCCCAATGGAGCAGG
GAAGTCAACTCTTCTGAAGCTGCTAACTGGAGAGCTACTACCCACAGATGGCATGATCCGAAAACACTCTCATGT
CAAGATAGGGCGTTACCATCAGCATTTACAAGAGCAGCTGGACTTAGATCTCTCACCTTTGGAGTACATGATGAA
GTGCTACCCAGAGATCAAGGAGAAGGAAGAAATGAGGAAGATCATTGGGCGATACGGTCTCACTGGGAAACAACA
GGTGAGCCCAATCCGGAACCTTGTGAGACGGGCAGAAAGTGCCGAGTGTGTCTGGCTGGCTGGCCTGGCAGAACCC
CCACATGCTCTTCTGGATGAACCCACCAATCACCTGGATATCGAGACCATCGACGCCCTGGCAGATGCCATCAA
TGAGTTTGAGGTGGTATGATGCTGGTCAGCCATGACTTCAGACTCATTACGAGGTTGCACAGGAAATTTGGGT
CTGTGAGAAGCAGACAATCACCAAGTGGCCTGGAGACATCCTGGCTTACAAGGAGCACCTCAAGTCCAAGCTGGT
GGATGAGGAGCCCCAGCTCACCAAGAGGACCCACAACGTGTGCACCCTGACATTGGCATCTCTGCCAAGGCCATG
AGCATCATGAACTCGTTTGTAAACGACGTGTTTGTAGCAGCTGGCGTGTGAGGCTGCCCGGCTGGCCAGTACTCG
GGCCGGACCACCTGACATCCCGAGAAGTCCAGACGGCTGTGCGTCTGCTGCTGCCTGGGGAGCTGGCCAAGCAC
GCTGTGTCTGAGGGCACCAAGGCTGTCACCAAGTACACCAGCTCCAAGTGACCCAGGGCCTGACAAAAATAAAGG
GTGAACGTGTTAAAAA

WO 2004/030615

PCT/US2003/028547

2674/6881
FIGURE 2459

MPSDLAKKKAAKKKEAAKARQRPRKGHEENGDVVTEPQVAEKNEANGRETTEVDLLTKELEDFEMKKAAARAVTG
VLASHPNSTDVHIINLSLTFHGQELLSDTKLELNSGRRYGLIGLNGIGKSMLLSAIGKREVPPEHIDIYHLTRE
MPPSDKTPLHCVMEVDTERAMLEKEAERLAHEDAECEKLMELYERLEELDADKAEMRASRIHGLGFTPAMQRKK
LKDFSGGWRMRVALARALFIRPFMLLLDEPTNHLDDLACVWLEEEELKTFKRILVLVSHSQDFLNGVCTNIIHMHN
KKLKYYTGNYDQYVKTRLELEENQMKRFHWEQDQIAHMKNYIARFGHGSAKLARQAQSKEKTLQKMMASGLTERV
VSDKTILSFYFPPCGKIPPPVIMVQNVSFKYTKDGPCIYNNLEFGIDLDRVALVGPNGAGKSTLLKLLTGELLPT
DGMIRKHSVKGIGRYHQHLQEQLDDLSPLEYMMKCYPEIKEKEEMRKIIIGRYGLTGKQQVSPIRNLSDGQKCRV
CLAWLAWQNPHMLFLDEPTNHLDIETIDALADAINFEFGGMLVSHDFRLIQQVAQEIWVCEKQTITKWPGDILA
YKEHLKSKLVDEEPQLTKRTHNVCTLTLASLPRP

WO 2004/030615

PCT/US2003/028547

2675/6881
FIGURE 2460

GCCTAATTAAAGGCGGCGGAAGAAGGTGGGAGGGTCATGACGCAGCGAGTTTCAGTCGTGACTTTTCTGGGGGC
ATCGCGGCGTCCCTTTTTTTTTGCTTTTAAAGTAAAACGTCGCCCCGACGCACCCCCGCGTATTTCTGGGGGGCG
GAGGCGGCGGGCCACGGCGCGAAGAGGGGCGGTGCTGACGCCGGCCGGTCACGTGGGCGTGTGTGGGGGGGAGG
GGCGCCGCGCGCGGTTCGGGGCGGTTGGGAGCGCGCGAGCTAGCGAGCGAGAGGCAGCCGCGCCCGCCGCG
CGCCCTGCTCTGTATGCCGCTCTCTCCCGGCGCGGCCGCCGCCGATCACAGCAGCAGGAGCCACCGCCGCGCG
GTTGATGTGGTTGGGCCGGGGCTGAGGAGGCCGCCAAGATGCCGAGTCCAAGTCCCAGGAAGATCGCGATCCTGG
GCTACCGGTCTGTGGGGAAATCCTCATTGACGATTCAATTTGTTGAAGGCCAATTTGTGGACTCCTACGATCCAA
CCATAGAAAACACTTTTACAAAGTTGATCACAGTAAATGGACAAGAATATCATCTTCAACTTGTAGACACAGCCG
GGCAAGATGAATATTCTATCTTTCTCAGACATACTCCATAGATATTAATGGCTATATTCTTGTTATTCTGTTA
CATCAATCAAAAGTTTTGAAGTGATTAAAGTTATCCATGGCAAATTTGTTGGATATGGTGGGGAAAGTACAAATAC
CTATTATGTTGGTTGGGAATAAGAAAGACCTGCATATGGAAAGGGTGATCAGTTATGAAGAAGGGAAAGCTTTGG
CAGAACTTTGGAATGCAGCTTTTTTGGAACTTTCTGCTAAAGAAAATCAGACTGCTGTGGATGTTTTTCGAAGGA
TAATTTTGGAGGCAGAAAAAATGGACGGGGCAGCTTCACAAGGCAAGTCTTCATGCTCGGTGATGTGATTCTGCT
GCAAAGCCTGAGGACACTGGGAATATATTCTACCTGAAGAAGCAAAC TGCCCGTTCTCCTTGAAGATAAACTATG
CTTCTTTTTTCTTCTGTAACTGAAAGATATCATTGCGGTGAGAGCTCCCTCCCTTCAAGATTATGTTAACTCT
GAGTCTGTCCAAATGAGTTCACTTCCATTTTCAAATTTAAGCAATCATATTTCAATTTATATATTGTATTCT
TAATATTATGACCAAGAATTTTATCGGCATTAAATTTTCAAGTGTAGTTTGTGTTTAAAAATAATGTAATCATCAA
AATGATGCATATTGTTACACTACTATTAAGTGGCTTCAAGTATATCAGTGTATTATTTCAATTGTGTTAAATGTATA
CTTGTAATAAAATAGCTGCAAACCTCAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2676/6881
FIGURE 2461

MPQSKSRKIAILGYRSVGKSSLTIQFVEGQFVDSYDPTIENTFTKLITVNGQEYHLQLVDTAGQDEYSIFPQTYS
IDINGYILVYSVTSIKSFEVIKVIHGKLLDMVGKVQIPIMLVGNKKDLHMERSVISYEEGKALAESWNAAFLESSA
KENQTAVDVFRRIILEAEKMDGAASQGKSSCSVM

WO 2004/030615

PCT/US2003/028547

2677/6881
FIGURE 2462A

GATTTACTTGGAGAAGATTTGCTATCTGGCAAAAAGAATCAGTCGGATTTGTCAGATGAAGAGCTAAATGATGAT
CTTTTGCAGAGTGATAATGAAGATGAAGAAAATTTTCAGTTCTCAGGGTGTTACAATTAGTCTGAATGCTACATCT
GGCATGGTTACATCATTGAACTCTCTGACAACACTAACGACCAATCTGGAGAACAGGAATCTGAGTATGAACAA
GAACAAGGAGAGGATGAAGTGGTTTATCACAAATCTGATGGATCAGAATTGTATACTCAAGAGTACCCAGAAGAA
GGACAGTATGAAGGCCACGAAGCTGAGTTGACAGAAGACCAATAGAATATGTGGAAGAGCCAGAGGAGGAGCAG
CTTTACACTGATGAAGTGTAGACATCGAGATCAATGAACCTTTAGATGAATTTACAGGAGGTATGGAAACATTG
GAACTTCAAAGGACATCAAAGAAGAATCAGATGAAGAAGAAGAGATGATGAAGAATCTGGACGATTACGTTTC
AAAACCTGAAAGGAAAGAAGGAACAATTATTAGGCTCTCAGATGTAAGTAGAGAGAGAAGGAACATTCCAGAACT
TTGGAGCTTTTCAGCAGAGGGCCAAGGCAGCATTGCTTGAATTTGAAGAAAGGGAGCGACAGCATAAACAAGGACGC
TACAGCTCCAGGCGGGGAGGACGGCGAGGAGTCCGCTGATGTGTCGTGGTGTGGGGGACCAGAGGAGAGAGAGC
ACCGAGAGGGGACAGGATGAAGGACCACAGACCTGCGCTGCTTCCCTACACAGCCTCCTGTCTGTGATACTTCCAGAG
GAGGAATTAATGAGCGACCTGATGCCCTAAGATGACATAAGCTGTTGGACCTTGCTACCTAAAGCCTCTAGAGAG
CCCCAGGCTCCCCCTCCACCGCTCCGCGCCTCAGCAGCAGCCGATCAGAAGCCTGTTCCAGCCGACGCGCTG
CAGCCGCTGCTTCCGGTGCAGCACCCGCAACCCATCCCCGCTCAGGGAATGCACATGCCTCCCCAGCTAGAG
ACCCCAAGGATGATGATGACCCCGCCACCCGTGACTCCACAGCAGCCCAAGAACATACACATCAACCCGCACTTC
AAAGGGACGGTGGTCACGCCCTGTTCAAGTGCCCTTGCTACCAAGTTCAGGACCTGTTCCCAACAGTTTCAGCCAGCCCCA
CAGAGATTCCCAGGCCCTCCAGAATTTCCACAGCATACACCTGGACCTGTTCCCAACAGTTTCAGCCAGCCCCA
CGACTCCCTCTCCAGGACCAAGTGAGAGCCCCACCCCGCTCAGGATCGAGACCCCTTCTTCTTAGGAGTTTCA
GGTGAACCAAGATTCCCAGGCCATCTTTTTCTGGAACAGCGAAGTCCCCCTCCACCACCACCGCTCCTACCCTT
CTTAACAGTAGCCATCCTGTTCTTACTCAGAGTCTCTACCATTCAGCCAGGACCAGCATTTAATCAGCAA
GGACAGCAGCCAGTGTTCCTCAAGAGAGCGGCCGTACGACCAGCCTTGACGCTCCAGGTCCGGTGGGGATTCTG
CACTTTAGCCAGCCTGGGTGCGCAACCACAGGCCCTTCACTTCTCTAGACAGCCGTTCCTGCCAGGCCAGGA
CAGCCGTTTCTGCCCACACACACAGCCCAACCTGCAGGTAATGCATCCTGAGTGAACCTCCAGGGAAAAAATG
TGAGCTTCAAGGCTTGTGTTCATAAAGTTTCAGATTTTTATTTGAGCCTACTAATTTGTGGTTATTTAAAGA
ATAGAGTATTAGTCTCAAATGTACTGTTTGTAAAGACAACCTTTTTTCAACAATGTTACTTATCTCAATACAAGA
AAAAAATGGGAAAAATGTCATTTTTTGGGAATGAAAAATGCTACTTATTATAATTGTTTAAAGGGTATACTACTA
ATAAAAATTAGGACATGTTTTGATAATACATTTGCTCATCTGTATAAAAATTTATGAGAGGTTTACCAGTGGAAT
ACTTTGTCAAATTTATATTCTGTCAGTAGACAGTTTTGAAAAGAGTCTTTGCATGGAGGGAAGAAGATGTTGCTGT
TCACITGGTTATTTGAAGGCCTTGAGTGCCCTCTGCCGACCGGCTTCTGCTTCATGGGTTTTCTACTGGTTATTTGA
AGGCCCTTGAGTGCCCTCTGCCCATCGGCTTCTGCTTCATGGGTTGACATGCGTCTGTAACATCTTTCTTACCAAG
TGTATATTTCTTCTTGTATTGTAGGGTTACTATTAAAAATACATAGCGATGGTAACTTGAATCAACTATTTAAAA
ATACGTGGAATACGTATCTAAGCCAAAAACGGAAAAATGAATATTATCTAGGGTGTAAAGGAAGATAAAATGTTT
TTAAGAATTTTTCTTTTTTATTAATAAAAAATGCAATTAATACATCCCCATTGCAGAAATTTTCAAGTATATATAAGA
AAGGAAATTAATACTCTCGTTACCTAGAAACAATTCAGGAGCTTTTTTTTTTGTCTTTTTTTAAATGCACATCT
TCTCGCCACCTGCTTTTTCCCTCCAGTGTCACATATCATTTGATCTTTTCATGTGAGCGAGTTGGTTTTGATGCC
ATCGTTTGAGAGTGCTGTATGCGGTTCCCTTTTATGCTGTCTGTGTGGTTGCATGTGTGTATACTGGTTTCAGTA
CTTTAGTATCATAGTGCTACAGGGAACATGCTTTAGAGTTATGAGTTTGTCTGCATACCTAGTTTTCTTAGGAC
AATTCAATCCTAGAATTACTGGATTAAATATAAAATTTAAGGTAATAGCTTCTGGCTTATTACTGCATTTTAGAT
AGTATTACCTTCATCAGCAAGTCTAAAATGAAGTTTGGTATCGCTGAAAGTTCTTTCTTGTGTTGAGGTTTTT
TAGGAAATGATTGAAGTGATTATGCCCGGTGTAACCATTTATGAAGTGTGTTCTCTTTCTTTGGAAATGGAAG
GGGCCGTTGCATCCTCCATTGCCCTCCGCTCAGCCTCAGCCTCAGCAACCTCAGCAACAGCCCCCGCCACAG
CACCAGCCTCCGCACCAGCCCCCGCACCAGCCCCCGCCCCAGCACCAGCCCCACCCAGCACCACACAGCAC
CCGCCGACGACCAGCACCACCACCACCACCACCTGTCCGTCCCGCCCCCTCCTTTGATGCCGATGTCTCAG
CCACAGTTCCGGCCTCACGTACAGACCGCTCAGCCTCAGGCCAGCAGCAGCCGGATGCAGTGCCCCCAGCGCCAG
GGGCTCCGGCATAATAACAATTCTCAGAATGTAAGCAAGCGGCCATGCAGCAAATGCAGCCCACTGCGCCAAGG
AACAGCAATTTGCGTGAATTACCCATAGCGCCGTACACGTGATAGAAATGAGCAGCAGCCGCTGCTCTGCCACG
CCCTCAGCACAAGTGAACCTATCGTCAGCGCGTCACCACCCTCGCGGGCGGTGGCGGGTTCCAGAAGCTCACAG
GGAAAGACGGAAGTGAAGTCAAGCCAGCTAGCCCTGTGGCTCAACCTAAAGAAGAGGCAAAAACAGAAACAGAG

WO 2004/030615

PCT/US2003/028547

2678/6881
FIGURE 2462B

TTTCCTGATGAAGATGAGGAAACAAGGTTATATCGCTTAAAGATAGAAGAACAGAAACGCCTAAGAGAAGAAATC
CTGAAACAGAAGGAGTTACGGCGGCAGCAGCAGGCTGGTGCCAGGAAGAAGGAGCTGCTGGAGAGACTCGCGCAG
CAACAGCAGCAGCTGTACGCTCCCCACCCCCAGCAGAGCAGGAAGAGCAGGCACTGTCACCATCACCCACCAAC
GGTAACCCACTGTTGCCCTTTCCAGGTGCACAGGTCAGACAAAATGTGAAGAACAGACTTCTTGTTAAAAACCAG
GATGTCAGTATTTCAAACGTTTCAGCCAAAACATCCAATTTTGTACCATCCAGTGCCAACATGCAGTATCAAGGA
CAACAGATGAAAGCACTGAAACATTTGAGACAGACCAGAACAGTTCCCTCAAAGTCAGACTCAGCCGCTGCATAAA
GTGCTCCCGATCAAACCTGCAGATGTGGAGGAGCCAGCTGTCCCCCAGACTCCTCGAGTGGCGTCCATCCAGGGC
CGGCCCCAGGACACAAAGCCTGGCGTGAAAAGGACTGTCACGCACAGGACAAACAGTGGTGGTGGAGACGGGCCC
CACATCAGCTCCAAGGTCAGGGTGATTAAGCTGTCAGGTGGGGTAAGTTGACAAGTTTTATGAGAGCCTCTTTGA
GTCTGTGTATCACATAGAATGTCCTCATTTCAGAGAAATGTTTTGAAGAAAGAATTAAAAAGTTACCTCTGTTAT
AGTCTTGTAACAAAAAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

MIEVIMPGVTIYELLFLFLWKWGKPLHPLLPPHPQPPQQPQQPPPPQHQPPhQPPhQPPhQPPhQPPhQPPhQPPhQPPhQPPh
QHQH HHHHHHL SVPPP LMPMS QPQFRPHVQT AQPA SSSRMQC PQRQGLRHNTTSQN VSKRPMQMOMPTAPRNS
NLRELPIAPSHVIEMSSSRCSATPSAQVKPIVSASPPSRAVAGSRSSQGKTEVKVKPASVAQPKEEAKTETEF
DEDEETRLYRLKIEEQRLREEILKQKELRRQQAGARKKELLERLAQQQQQLYAPPPAEQEEQALSPSPTNGN
PLLFPFGAQRVNKNRLLVKNQDVISNVQPKTSNFVPSSANMQYQGQMKALKHLRQTRTPVQSQTQPLHKVL
PIKPADVEEP AVPQTPRVASIQGRPQDTKPGVKRTVTHTNSGGGDGPHISSKVRVIKLSGGV

WO 2004/030615

PCT/US2003/028547

2680/6881
FIGURE 2464

GCCGGTGTCTGGTTCGCGGTACCTGTTCCAACACGGCTCGCGGGCCCGTGCCGGCTCCGGTCCCCGGCGCGGCTG
TCCGAGCCCCCTGCGGCGGGCGGACGATGGTGTGGCGGAGCACGCGGACGCGGGCGGGCGGGCGGGCATGAAG
GAGGATGGGAAGGGCAGGACGAGGTGTCGGCGCGGGAGCAGCACTTCCACAGCCAAGTGCGGGAGTCCACGATATG
TTTCCTTCTTTTTGCCATTCTCTACGTTGTTTCTTACTTTCATCATCACAAGATACAAGAGAAAATCAGATGAACA
AGAAGATGAAGATGCCATCGTCAACAGGATTTCTGTTGTTTTTGGAGCACGTTCACTCTCGCAGTGTCAGCTGGGGC
TGTTTTGCTTTTACCCTTCTCAATCATCAGCAATGAAATCCTGCTTTCTTTTCTCAGAACTACTATATTTCAGTG
GCTAAATGGCTCCCTGATTTCATGGTTTGTGGAATCTTGCTTCCCTTTTTTCCAACCTTTGTTTATTTGTATTGAT
GCCCTTTGCCTTTTTCTTTCTGGAATCAGAAGGCTTTTGCTGGCCTGAAAAAGGGAATCCGAGCCCGCATTTTTGA
GACTTTGGTTCATGCTTCTTCTTCTTGCGTTACTCATTCTTGGGATAGTGTGGGTAGCTTCAGCACTCATTGACAA
CGATGCCGCAAGCATGGAATCTTTATATGATCTCTGGGAGTTCTATCTACCTATTTATATTCTGTATATCATT
GATGGGATGTTTGTACTTCTCTTGTTGACACCAGTTGGCCTTTCTCGTATGTTTCACAGTGATGGGTTCAGTTGCT
AGTGAAGCCAACAATTCTTGAAGACCTGGATGAACAAATTTATATCATTACCTTAGAGGAAGAAGCACTCCAGAG
ACGACTAAATGGGCTGTCTTCATCGGTGGAATACAACATAATGGAGTTGGAACAAGAACTTGAAAATGTAAAGAC
TCTTAAGACAAAATTAGAGAGGCGAAAAAAGGCTTCAGCATGGGAAAGAAATTTGGTGTATCCCGCTGTTATGGT
TCTCCTTCTTATTGAGACATCCATCTCGGTCCCTCTTGGTGGCTTGTAATATTCTTTGCCTATTGGTTGATGAAAC
AGCAATGCCAAAAGGAACAAGGGGGCCTGGAATAGGAAATGCCTCTCTTTCTACGTTTGGTTTTGTGGGAGCTGC
GCTTGAAATCATTTTGATTTTCTATCTTATGGTGTCTCTGTTGTGCGCTTCTATAGCCTTCGATTTTTTGGAAA
CTTTACTCCCAAGAAAGATGACACAATATGACAAAGATCATTGGAAATTGTGTGTCCATCTTGGTTTTGAGCTC
TGCTCTGCCGTGTGATGTCGAGAACACTGGGAATCACTAGATTTGATCTACTTGGCGACTTTGGAAGGTTTAATTG
GCTGGGAAATTTCTATATTGTATTATCCTACAATTTGCTTTTTGCTATTGTGACAACATTGTGTCTGGTCCGAAA
ATTCACCTCTGCAGTTTCGAGAAGAACTTTTCAAGGCCCTAGGGCTTCATAAACTTCACCTTACCAAATACTTCAAG
GGATTCAGAAACAGCCAAGCCTTCTGTAAATGGGCATCAGAAAGCACTGTGAGACGCACAGACGGCGTCTTCTGC
CACCAAGAGACCCGAGAACTCCAGATTCACGACATTCTGTCCCATGTAGAAGCATTTCATTCAACCGTGGCCC
CTCTTCAGAACCTAGACCTATCAGTGCCATTTTTTTTTTCTAATCTACGAAGAACTTGGCTATGGCTGATCTTTT
TTAAATTTAACTTTCTGATGGACCTGTAGTTTCCAGTTAAGTGCAGATTCTTACAGACATATAGAACAGCGCA
TTCTTCTGTAGACATTTGCTCATGTTGGTAAATACAATCACCATATGAAAAAATTGTTTTACCTGATATGAAA
ATGTTAGAAAAGGCAAACTCCGGGACTTCTAAAGATTTACTTAAATCCCATTATGTACTTTATTTCAGAAATGTAGA
AGCTGACTTGAAAGGCATCCTTGGTACTAAGTGAAGCTTATTTCAGAAAATGCATTTTTTCAAATGCAATGGCACT
GCTTGTAGATATCATTTTTTGCAGTGTATGTTGGAGCTGTAATGGTTGCAATTATGTTTCTTATTTCTTAAAGC
AAAAAGCGTAGTTTCTGATTTATGTTATAGAATGATACTGATTAGACTTTGAGCCAAGGGGAAAAATACTAAATTC
TTTTAAACCTGGAGCCTTAGAGAGCCACAGGAATATCTTCTGTTGTACAGTCTAATAAGCTGTGGTAGGAAGTAT
CATGTAATCACAGTTTAAATGACAGTTTATGTATATATATAATTTCAGTATTCCCTCTGATAACATAGTTGCCAGTG
TTTAATACACTTGTAACCTGGATTTTTTACCTTATAGGCTATATGTATACTCAGTTTTTTTTAAAGCATTTTTTTTCAG
AGATCACTTAATTCCCCATGCTTCTGCAATGCATATAAAAACTATAAATGCCGAGTGGTAGAACTCCTCTTTCT
TCATAGTCTCAGGCTTTGGTTACATTTGCATATGCCATTTGAAGCCTCCAGCTTTTACCAGTTTAAACATCCAAA
GTTACAGCATCAGCATTTCATGGTGTAAAGAACAGTTTTGTCAGTATAACACGATCTGATAATCATTTCAGTTATTAA
ATTGTAAATAATTATTGGGATGGTTTCTTGGCTTTAAGTCCACTGAATAAAAACTATGAAATTGCAAAAAA
AAAAAA

WO 2004/030615

PCT/US2003/028547

2681/6881
FIGURE 2465

MEGQDEVSAREQHFHSQVRESTICFLLFAILYVVSFYIITRYKRKSDEQEDEDIVNRISLFLSTFTLAVSAGAV
LLLPFSIISNEILLSPQNYIIQWLNGSLIHGLWNLASLFSNLCLFVLMPPFAFFFFLESEGFAGLKKGIRARILET
LVMLLLLALLILGIVVVASALIDNDAASMESLYDLWEFYLPYLYSCISLMGCLLLLLLCTPVGLSRMFTVMGQLLV
KPTILEDLDEQIYIITLEEEALQRRNLGLSSSVVEYNIMELEQELENVKTCLKLEERRKKASAWERNLVYPVMVL
LLIETSISVLLVACNILCLLVDETAMPKGTRGPGIGNASLSTFGFVGAALEIILIFYLMVSSVVGIFYSLRFFGNF
TPKKDDTTMTKIIIGNCVSILVLSSALPVMSRTLGITRFDLLGDFGRFNWLGNFYIVLSYNLLFAIVTTLCCLVRKF
TSAVREELFKALGLHKLHLPNTSRDSETAKPSVNGHQKAL

WO 2004/030615

PCT/US2003/028547

2682/6881
FIGURE 2466

TCTTTCCGTAACCGTAGCTTGAGGCACATTTCTAAATATGCAGCATGGAACGCTTGGCGGTTCTGAACGCGCAT
CTCGTGCTGCTCCTGTAGGGCGGTTAGGACGCGCTCCTCTGGCGAGGAAGGTGGCAGCCTCCACTGTGCACGGGT
CACAGGCGAGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGT
GAGCTGTGCGGGTCCAGGCAGTGCTCAGTGGTGAGAGCCACAGCACATTTGAAAGTCCACATGTGTTTGCCCCAC
TGTGGTCCAGGACATGTGTGAGCCACACTCAGTGGACTTGCACCTGTGACATGTTGGTCAGCGTGGCGGGCCGTCA
GCTGGGTGTGGAATGCATCTGATTGGAGCCTGGCACCCGGCCTACCATGATTGTGATTCTCTGGGGCGAGTCCGTG
AGTGTGGGCAGGGCCTCAGGCCCCCAAGAGGGCTGTGAGCAGGCACCTTCCTGTGAGGCACGATGCCACCATGTG
AAGTTGTGTGGGTCTTTGGAGAGTTCTGGCAGGTTGAGGGCCTGTGCGTGTGGGACCCAGGCCTGCCCTGCCTGC
TGCCGGCCATGTTCCCTCTGCCCAGTCATGTTGACAATTGTGGCCAAATTCAACATCGGGCCTGTTTCTCTGCACC
CACGTTGGCACACACTGAGTTCAAGACAGTTTCTGCAGAAATGAATCCAGAGGTGTTTATTTCTGGCACGTTGGA
TCAGACGTTTCAGAGGGTGGGGCTCTTTCTCCATGCACTTCAGCTGGATCAGTCAGTGTGAGCCATTGACTTTAGC
AACAGGGAAATGAAAGACTTTCTCAATAAGAAATGGGACTTTCTCACGCTGGATGGCACAGAGCTGGCAAACAT
GAGGCCAGTCCACACCAAGGCTTTGCCTGCAGAAAGGCTGCACTGTGGCCAGCGGGGGAAGCGGAGGAGACACCT
GTGGACACCCCTCCCCACAGGTGGGCACACCTTTGCGCAGGCCAGTGTGCGTTCCTGAAGGAGAGCCCAGGGTGGG
GTTCCGGGACTGAGGTGCAGCCGTGTCCAGGGTGGGCTTCTAGCTCTGCCGCTGGGCGGAACGGGGTAGGTCCC
AGGGTGGGGTTCAGGACTGAGGTGCAGCCGTGCCAGGGTGGGCTTCTAGCTCTGCCGCTGGGCGAAGTGGGG
TAGTCCCAGGGTGGGCTTTTAGCTCTGCCGCTGGGCGGAACCGGGTAGGTGGGAGTCCTCACTTCTCTGCAGGG
TGGTGAAGCTCTCTGGGTAGTGTGAGCAGTTCTCAACGTGCACCTTGGAAGCGCCGTTTTGAGGTTTAGCTGT
GGCCAAGATAGATGACTTCATTTTGTGTCTTTTGTCTTAAACATGGGGAGATATTTAGAAAACATGTTTGGCTC
TTGCTGGGGAAGCAGTGCTGTTCCGTACAGTGTTTTACAAGCCGTGTTTCTTAGGATTGAAAGAAGGTGGCAAG
AGGAAGAAGCAGAAGCAGAGAGAGGAGTGAAGAAGAAGTCAACAAAGGCAATCACTAGACCGGACTTGAG
GCACGCGGTGCACCCCCAGACGCTGGCGCTCCACCGTGCTCGGCATGCGGTCTGTCACACGCGCTAGGTAGCAGC
GTGGTTCAGGACTGTCTCGAGGCCACACTCGCTCGGCAGGATTATGCGATCACGGATCAGTCAGAGCAGGGTCAG
GAGACGGGGCTGACGGCACGGGTGGCGGGGACAGACGTTTGGGACTTGGCCGCGACTCTCTGCTTCTCTCCAGCT
CTCAATCTGCTGCATTTTCTCTAGTGCTTCCGGATCCTCTTCACTTCTTTTCGGCTACTCAACCACTCCGCATGC
TGCTGGAATATTTCTGGCTTTAGAAGTACAGGAGGGCGCAGATGGCTAACTGAGTAACATTGAAATGAGGCT
TTCTGTGGCGGCGTAGTGTGGAATTAGAAGGTAATTCAGTAGAGTGTAACCTAGAGAATATTGCAAGTGACAC
ATTGAATCCTGCCCCTCAGGGCACCTTTTCTCAGAGCAATCCGGCCACACGAATAGAAGGCTGTGCTGAATCAC
ATCAGATGTAAATCATTCTTCTGTTTACTCTTTTAAATTTTTCATCCTTTGCGAGGTAGTGCAAATTCACCTTCAA
ATATGGTGTAGGTTTTGCTAGATTCCATATTTTTTCTTGGATTTTGTCTAATTATTTTTAGCAAAAAATTTTTG
CTCAGTGGCACTCTCCCTAGTGCTCATGGGTTAGGGCCATGCTGGGGAACGGGCGGTTATTACACACGCGCA
AAACACCCAGAGACGGCACAAGGAGGTTGAACATCATGTTTTCAGTTTCGGAACATTGACTCCTTACGAAAGTCACT
TCATTCTAACTAGATGCGCCCACTTCCGGTCAATTATTTTCGTTTGCATGATGTATTGCTTCTTACGTTTTGTTTT
TATTGACACGGAGTAGAATTCCAGGGCTGCCTTACTTCTTCCCTGCATGCTCCCTCCAGTGACTTTCCTTCC
CTTTCACATGAGGATCTGCCGTTTCATGTTGCTTTCTCCTTTGCTCTTGGACTTGGGGCATTGTGAAAAGCTT
TGCTGTGATTTAAAAATGCCAGCAATTTTAACTAGCAGTGTTGAAGCTGGGAATTTTTTGGCGCAATCCATGTA
GCAGTGACCCAGGCTTGGGAGCCAGAAACAAGTGTGACCTGGGATTTTATTTAACACAACGTGTGCCAAAGAGTT
GGCTTTGTTTATTTGGTTTTGGCGGGGAGAGGAGTGGTATTTGATGCTTTCTGTGGACAATGTAACCCTAAACAC
ATCATGTATTTTAAATGCCACCTACATAAATAAAACATAAGCATATTGAATAC

WO 2004/030615

PCT/US2003/028547

2683/6881
FIGURE 2467

CTAAGACAGGTGCAGACGTATGTCGGCTTTGGCGTATCCATCAAGCTTTATATTGCTTTGATTATGATTGGAGG
AAAGTGGAGAAATTAAAGATAATGTTACTTGAGTGCTTCATAAATATTAATTATATCAAGAAAGAAGAGGGGAAGAA
GATTTCTTAGTTGTCTCTTCAACTGGAATATCAACTTCATCAAAATGATCCACGGGACCATTAAAAACCAGTTAC
AGGGATTACAAAAGTCTTTGATGGTATACATTGCAGAAATTTATTTACAGAGCTTGAAAAAGGCTTCAGGGAAAA
TACTGGAGGCGATTGAAAATGATTGCATCCAGGACTTCATGTTTCACGGGATACACCTTCCGAGGAGGTCTCCAG
TGCATTCCAAAGTGCAGGAGGTTCTGAGTTACTTTACCATCAAAAGAAAGTTCCGGCAGGGAGTGGAAGAGATGC
TTTATAGATTATATAAGCCCATCCTTTGGAGAGGATTAAAGGCCAGAACTCTGAAGTTTCGATCAAATGCTGCAT
TGTTGTTTGTGAAGCATTTCCTATTAGGGATCCAAACCTTCATGCTATTGAAATGGATAGTGAAATCCAGAAAC
AGTTTGAAGAGCTCTATAGCCTTTTAGAAGATCCTTACCCGATGGTCCGTTCCACAGGGATCCTTGGTGTGTGTA
AAATAACTTCTAAGTACTGGGAAATGATGCCCCGACCATTCTTATTGACCTCCTGAAGAAGGTGACTGGGGAAC
TGGCATTGACACGAGCTCAGCTGATGTTCTGTTCTGCTTTAAGTGTCTGCCAATGATTTTGGACAACAAAC
TGAGCCACCCATTGTTAGAGCAGCTCCTTCCAGCTCTCAGATACAGTCTCCACGACAATTCCGAGAAAGTGAGGG
TAGCTTTTGTGGACATGCTGTTGAAGATCAAAGCTGTGAGGGCTGCTAAGTTTTGGAAAAATATGTCCCATGGAGC
ACATTCTGGTTTCGTCTGGAAGTCTGATTCTCGACCTGTGTCTCGGCGCCTGGTGAGCCTCATCTTAATCTTTCC
TGCCTGTGAATCAGCCGGAGGAGGTCTGGTGCGAGCGCTGTGTACCCCTGGTGAGATGAACCACGCCGCTGCCA
GGAGGTTCTATCAGTACGCCCACGAACACACCGCCTGCACCAACATAGCAAAGCTGATTACGTTATTCGTCATT
GCTTAAATGCCTGTATCCAGAGGGCAGTGAGAGAGCCTCCAGAGGACGAGGAGGAAGAGGACGGAAGGGAGAAGG
AGAATGTGACTGTTCTGGACAAAACACTGTCAAGTAAACGATGTTGCATGCATGGCAGGTTTACTAGAAATCATTG
TGATTCTCTGGAAGTATTGACAGAAGTATGGAAAAATAATAAGAGGGCCAACTTTACACGATTAACAAGTTTG
CCTCTGTGCTTCCAGAGTATCTGAAAGTATTTAAGGATGATCGCTGCAAGATCCCTTTATTCATGCTAATGTCTT
TTATGCCGGCCTCTGCTGTCCCCCATTACAGCTGTGGTGTGATTTCCACGCTGAGAAGCCGGGAGGAGGGCGCTG
TGGACAAGAGCTACTGCACTTTGTTGGATTGCCTCTGCTCCTGGGGGCAAGTGGGGCACATTCTGGAGCTTGTG
ACAACGGCTGCCACAGAGCATGCCAGGCCAAGAGCAACACAGCTTCTAAAGGTAGGGTGCAGATCCATGACA
CACGCCCAGTCAAACCTGAATTGGCATTGGTCTACATTGAGTATCTGCTGACTCATCAAAGAACCGCAGTGCT
TGCTCTCTGCTCCTCGGAAGAACTTAACCATCTTTTGAAAGCCCTTGAAACGTCAAAGGCAGATCTGGAGTCAC
TTCTGCAGACACCGGTTGGGAAGCCTCGTGGCTTCAGTGAAGCAGCTGCCCCGCGAGCCTTTGGTCTCCACTGTC
GCCTGAGCATCCATCTTCAGCACAAGTTCTGCTCAGAAGGAAAGGTGTATTGTCCATGTTGGAAGACATGGCT
TTTGGTTAGAAAGCAAATTTTATCTTTTATTCAAGATCAAGAAGAAGACTACCTGAAGCTTCATAGGGTCATTT
ATCAGCAAATTATCCAGACCTACCTGACTGTGTGTAAGATGTTGTTATGGTAGGCCTTGGTGACCATCAGTTTC
AGATGCAACTCTTACAGCGGAGTCTTGGAATCATGCAAACAGTGAAGGGATTTTTTTATGTTTCACTTCTTTG
ACATTCTGAAAGAGATAACTGGAAGTTCCTTGATTGAGAAAACAGATTGAGATGAAGAAGTTGCAATGCTGTTGG
ACACAGTCCAGAAAGTATTTTCAGAAAATGTTGGAATGTATTGCACGGAGCTTCAGGAAGCAGCCGGAAGAAGGCC
TGCGGCTGCTTTTATCTGTTTCAGAGGCCCTTTCATGAGTTCACTTACTGCTGTTGAGTCTCGGCACACAGACACCC
CTGTGCACCGGGGTGTACTTTTACTCTGATCGCTGGGCCTGTGGTTGAGATAAGTCACCAGCTACGGAAGGTTT
CTGACGTAGAAGAGCTTACCCCTCCAGAGCATCTTTCTGATCTTCCACCATTTTCAAGGTGTTTAATAGGAATAA
TAATAAAGTCTTCGAATGTGGTCAGGTCATTTTTGGATGAATTAAGGCATGTGTGGCTTCTAATGATATTGAAG
GCATTGTGTGCTCACGGCTGCTGTGCATATTATCCTGGTTATTAATGCAGGTAAACATAAAAGCTCAAAAGTGA
GGGAGGTTGCAGCCACTGTTACAGAAAACATAAGACATTGATGGAATTAATTTGGAAGAGGATAGCATTGAAA
GATTTCTCTATGAATCATCATCAAGAACTCTGGGAGAACTTTTGAATTCATAACCAAGCCAACATCTCCAGACAT
GTAATAATAGGGAAGAGTGAATCAATGAAATGCCTGTGTATTTTCTATTGTTTTTAATGTTAATAACCCATA
TAATAGGGAAAGGGTGGGATTTTTTGTGGGAATGTGGGAAGGTGGGGGTATGGAGGAGATAACTCAAACTTC
TTCAATTTTGCCTAGTGCCTGCGTAAATAATATATTTAATAATAAGGACTCCAGGTATAAATGGTGTAGAAATCC
ATGATTCCAAGAAAAACACTTTTCTAGCAAACTGGTTGTTTTTAAATGACTTTTATATATGTAATATTGCTT
GGAACTATGAGTAATAAGCAATGACAACAAAAA

WO 2004/030615

PCT/US2003/028547

2684/6881
FIGURE 2468

MLLECFININYIKKEEGRRFLSCLFNWNINF IKMIHGT IKNQ LQGLQKSLMVYIAE IYFRAWKKASGKILEAIEN
DCIQDFMFHGIHLPRRSPVH SKVREVLSYFHHQKKVRQGV EEMLYRLYKP ILWRGLKARNSEVRSNAALLFVEAF
PIRDPNLHAIEMDSEIQKQFEELYSLLED P YPMV RSTGILGVCKITSKYWEMMPPTILIDLLKKVTGELAFDTSS
ADVRC SVFKCLPMILDNKL SHPLLEQLLPALRYSLHDNSEKVRVAFVDM L LKIKAVRAAKFWKICPMEHILVRLE
TDSRPVSRRLVSLIFNSFLPVNQPEEVWCERCVT LVQMNHAAARRFYQY AHEHTACTNIAKLIHVIRHCLNACIQ
RAVREPP EDEEEEDGREKENVTVL DKTLSVNDVACMAGLLEI I VILWKSIDRSMENNKEAKLYTINKFASVLP EY
LKVFKDDRCKIPLFMLMSFMPASAVPPFSCGVISTLRSREEGAVDKSYCTLLDCLCSWGQVGHILEI VDNWL PTE
HAQAKSNTASKGRVQIHDTRPVKPELALVYIEYLLTHPKNRECLLSAPRKKLNHLLKALET SKADLESLLQTPGG
KPRGFSEAAAPRAFG LHCRLSIHLQH KFCSEGKVYLSMLEDTGFWLESKILSFIQDQEEDY LKLHRVIYQQI IQT
YLTVC KDVMVGLGDH QFQMQLLQ RSLGIMQTVKGFFYV SLLLDILKEITGSSLIQKTDSD EEVAMLLDTVQKVF
QKMLECIARSFRKQPEEGLRLLYSVQRPLHEF ITAVQSRHTDTPVHRGVLSTLIAGPVVEI SHQLRKVSDVEELT
PPEHLSDLPPFSRCLIGII IKSSNVRSFLDELKACVASNDIEGIVCLTAAVHI ILVINAGKHKSSKVREVAATV
HRKLKTFMEITLEEDSIERFLYESSSRTL GELLNS

WO 2004/030615

PCT/US2003/028547

2685/6881
FIGURE 2469

CGGGACGGAGGGGGCGGCCCCGCGCTCGGGGCGCTCGGCTACAGCTGCGGGGCCCCGAGGTCTCCGCGCACTCGC
TCCCGGGCCATGCTGGAGGCGGCGGAACCGGGGACCTAGGACGGAGGCGGCGGGCGCTGGGCGGCCCCCGGCA
CGCTGAGCTCGGGATGCGGACGCTGCTGCCTCCCGCGCTGCTGACCTGCTGGCTGCTCGCCCCCGTGAACAGCAT
TCACCCAGAATGCCGATTTTCATCTGGAATACAGGAGGAAGAAACAAAATGTGCAGAGCTTCTGAGGTCTCAAAC
AGAAAAACACAAAGCCTGCAGTGGCGTCTGGGACAACATCACGTGCTGGCGGCCTGCCAATGTGGGAGAGACCGT
CACGGTGCCCTGCCAAAAGTCTTCAGCAATTTTTACAGCAAAGCAGGAAACATAAGCAAAAACCTGTACGAGTGA
CGGATGGTCAGAGACGTTCCAGATTTCTGTCGATGCCTGTGGCTACAGCGACCCGGAGGATGAGAGCAAGATCAC
GTTTTATATTCTGGTGAAGGCCATTTATACACTGGGCTACAGTGTCTCTCTGATGTCTCTTGCAACAGGAAGCAT
AATTCTGTGCCTCTTCAGGAAGCTGCACTGCACCAGGAATTACATCCACCTGAACCTGTTTCTGTCTTTCATCCT
GAGAGCCATCTCAGTGTGGTCAAGGACGACGTTCTTACTCCAGCTCTGGCACGTTGCACTGCCCTGACCAGCC
ATCCTCCTGGGTGGGCTGCAAGCTGAGCCTGGTCTTCTGAGTACTGCATCATGGCCAACTTCTTCTGGCTGCT
GGTGGAGGGGCTCTACCTCCACACCCCTCCTGGTGGCCATGCTCCCCCTAGAAGGTGCTTCTTGGCCTACCTCCT
GATCGGATGGGGCTTCCCCACCGTCTGCACTCGGTGCATGGACTGCGGCCAGGCTCTACTTAGAAGACACCGGTTG
CTGGGATACAAACGACCACAGTGTGCCCTGGTGGGTCATACGAATACCGATTTTAAATTTCCATCATCGTCAATTT
TGTCCTTTTATTAGTATTATACGAATTTTGCTGCAGAAGTTAACATCCCCAGATGTGCGGCGGCAACGACCAGTC
TCAGTACAAGAGGCTGGCCAAGTCCACGCTCCTGCTTATCCCGCTGTTTCGGCGTCCACTACATGGTGTGTTGCCGT
GTTTCCCATCAGCATCTCCTCCAAATACCAGATACTGTTTGAGCTGTGCCTCGGGTCGTTCCAGGGCCTGGTGGT
GGCCGTCTCTACTGTTTCTGAACAGTGAAGTGCAGTGCAGCTGAAGCGAAAATGGCGAAGCCGGTGCCCGAC
CCCGTCCGCGAGCCGGGATTACAGGGTCTGCGGTTCTTCTTCTCCCGCAACGGCTCGGAGGGCGCCCTGCAGTT
CCACCGCGGCTCCCGCGCCAGTCCCTTCTGCAAACGGAGACCTCGGTTCATCTAGCCCCACCCCTGCCTGTGCGGA
CGCGGCGGGAGGCCCACGGTTCGGGGCTTCTGCGGGGCTGAGACGCGGCTTCTCTTCCAGATGCCCGAGCAC
CGTGTGCGGGCAGGTCAGCGCGGTCTGACTCCGTCAAGCTGGTGTGCTCACTAAACCCCATACCTGG

WO 2004/030615

PCT/US2003/028547

2686/6881
FIGURE 2470A

GTGAACCGTG CATGTGAGGGATCTAGGTTGCGCTATCCTTATGAGAATCTAATACCTATTGATCTGTCACTTTCT
CCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTAACACGCCCAGTATTCTACATTATGCTC
CTACCTCCCAGCAGCCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAAAT
GGCCTATTTAGGCCCATAACCTACCTCAGGCAGTCTCCGCAGATGAGCCTACTGCCTCACAACAGCCTCCACAG
GCACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACCT
TCTCAAGTCGACCTCACCAGGCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCAGCTCCTGCATCTTGGTGG
CACCTCCAGGCCAGCCTCTGCCTCCCGTCGGCCTCTACAATCCCAACATCTGCCTCACAGCAGATTCTTCAGGC
CCAGCATCTGCCTCACTGTGGACCCCCCAAGCCAAGCTCCCAACCTTTCAGCAGCTTCTACACACCCAACTCCTG
CCACCCAGTGGCCTCTTTAGGCCAAGCTCATGCTTACAAGGGCCTTTCAGGCTCAACTTTTGTCTCATGGCAA
CCTTTTCTGGCCAGATTCTGCCTGTCTCCAGCAGCCTAGACAGGCCAGGTCTTGCCTCACACTGGCCTCTCT
ACATCCAGCTCATGCCTCAGGTGGCCTCTCCAGGCCAACTCCTGTCCCAGGACGTCATCTCCGGGCCAAAAC
TTACTCAAGTCAGACTCTCTAGTCCCAACTGCTGCCTCCTGGTGGCCTATGAAGGCCAAAATCTCCTCAAGTGG
ACCTCTCCAGGCCAGCTCCTGCCTCCTGTGCAGCCTCTACAGGCCAACTCTGCCTCATGGGGCTTCTCCAGG
CCCACCTCTTCTCTTGGCTGGGTCTACAGGCACAACCTGCTGCCTCACAACAGCCTTTTTTGGGCCAGTTCTCT
CCAGCTCATGGCGGCCAATGTAGGCCAAAACCTTCTCAAGTCAAACCTCTCCAGGCCACCTTCTGCTTCCCGGT
GGCATGAACAGGCCAGCTTTGACTTGAGAACAGCCTCTGCAGGCCCTGCTCTTGCCTCCCAGGGGCTTTTTCCA
GACCCAGCTCCTGCCTCATGGCAGCTGCCCCAGGCCAAATTTCTGCCTGCCTGCCAGCAGCCTCAACAGGCACAG
CTCCTCCCTCACAGTGGCCCATTTAGGCCAACTCATGACTGTGGGCCATTTCCAGGCCAGTGCCTGCCTCGT
GGCTGACTCTTGAAGGCCAAAACCTTCTCAAATCAGCCTTTTGCCCAACTTCTGTCTACTGTCCGACTCTACAGG
CCAGCCTCTGCCTCACAGTGGACCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGC
CTTTCCGCAGCCTCTACAGGCCAGCTCCTGCCTTGCACTGGCCTCTTTAGGCCAAGCTCATGCCCCATGGCGAC
TTTTCCAGGCACAGCTTTTGCTTTTGAGCCTGTCCAGGCCCAGAAATGTCCTTAACTCGGCATCTCCAGGATGA
GCTCATCTCCCAGTGCCTCTACAGGCCCGTCTCCTGCCTCACAACAACCTCCTTTGGGCCAACTCCTGCTGAGC
TGCTGGCAGCCTCTGTAGGCCACAGAATTCTTAAGGTAAAGCTTTCCAGGCCACCTTTGGCCTCCCGGCAGGCT
CAGCAATCAAACCTATTCCTCACTGCGGCCACCGAAAGCCAAGTTTCTCCCTGCCTCAGGCATCCTCCGAAAAC
TGAGCATTTGCCTCAGGTGGCCTCCCAGGCCATGAATCTGCCTGCCTCCCAGGCAGCTGCTGCCTCACAATGG
TCTCTTTAGGCCAGCTCATGCTAAAAGATGGACTCTCCAGGCACAGCTCTTGCTCCTGGCAGCCTCTGCAGGC
CCAAATCTCCAAAAGTTGGCCTCTCCTAACTCAGCTCCTGCCTCATGTCCGCTACACAGGCCAGACTCTTAC
CACACAGTAGACCTCCAGGCCACCACTTGCTGATCATAGCCTCCTAAGGCCAAGCTCCTGCCTTTCCGGCAGC
CTCTACAGGCCAAGCTCCTGCCTCGCAATTGCCTCTGTAGGCCAAGATCATGCCGTGAAGTGGCCTTCCCTAGCC
TAACTTTTGCTTTTTGAGCATACTCCAGTCCCAAACTTCTCCAGTCAGCCGGTCCAGGCCAAGCTCTTCTCTC
CCAAAGGCTTCTGCAGGCCAAAATCATCTGAAGTACCCTCTGCAGGCGCAGCTCCTGCCTCCAAGTGTGTGT
AGGCCAAGCTAATGCCTCACAGCACACTTTCCAGGCTGAGCATTCTCTTTGTGCATCCTCTCCAAGCCCTGAAC
TTACTCCAGTTGGCCTCTCCAGACCAAGCTCTCCCTCCAGTGGCCTCTACAGGCCAAAATGTCTCAGGTCAG
CCTCTCCAGGCCAACTCCTAGCTACCGGTGGCTTCTGCAGGCCAAAATCGACCTCAAGTCAGCCTCTTTCACACC
CAGCTCTTGCTCTGAGTGGCCTCTCCAGGAGCAAACTTTCTCAAGTCGGCCTCTCCAGGCCAGCCTCCTGCT
TCCCGAGGGCATGTACAGGCCAGCCTCTGCCTCACAGCAGACTCTTACACCCAGCTCTTCCCTGTCTGCGGCC
TCTCCAGTCCAAAGCTGCTCCTGCCTTTTGGCAGCTTGACAGGCCAGCTCCTCCCTCACGGTGGCCTCTTTTCG
GCCCAACTCATGCCTCTTGCAACGTGCCCAAGTGTACGCTCCTGCCTCACACTGGCCTGTGTAGGCCAGCTCAT
GCCTCTCGTGGCCTCAACGGGCCATCCCTGCCTGTGCGCGGCCCTCTACAGGCCCGGCCTCTACCTCACAGTGG
GCTCTCCAGGCCACCTCTTCTCACCGTGGCCTCCTGGGGCAATGCTCCTCCCTCTCGGGAGCCTCTGTGGGCC
CAGCTCCTGCCTCCAGTGGCCTCTGTGGCCAAGCCGTGCCTCAGGGCAGCCTTTCCAGGCCTAGCGTTTGCT
GCTTTGCATCCTCTCCAGGCCCTGGACTTCTCCAGTCGGCCTCTCCAGGCCAGCTCTTCTCTCGGCGGCCCTC
TGCAGGCCAGACTGTCTCAAGTCGGCCTGTCCAGGCCAGCTCCTGCCTCCCGGCGGCCCTCTGCAGGCCAAG
TCGTCTCAAGTTGGCCTCCCCAGGCCAGCAACGGCCTCTCGGCGGCCCTTTCCGGGTGCAAAAGTTCTCGAGT
CAGCCTCTCCAGGCCAGCTCCTCCTGCCTCCAGTGGCCTCTTTCGGGCCAGGCCAGCTCATGCCTCCCGGCGG
CCTTCCAGGCCCTGCTTTTGAATTTCCGTGGCCTCTGCAGGCCTCGACAAGGCCAGGCCTCCTGCCTCCAAAG
GCCTGCACAGGCCAGCCTCTGCCTCACAGCAGACTCTCCAGGCCAGCTAGCTCTCGCCTCACTGCGGCTTCCC

WO 2004/030615

PCT/US2003/028547

2687/6881
FIGURE 2470B

GAGTCCAAAGCTCCTGCCTCTCAGCCGCTTCGGCAGGCCCAGCTCCCGCCTGCCAGTGGCCTCTTCAGGCCCATG
GGGCTCATTCTCACAACGGCCTTTCAGGCCCAGTTTTCCCTTCCGGCGGCCTCTTGGCCTCTAATTTGTTTA
TCTTTTGGGTATAAATCCCAAAATATTGAATTTTGAATATTTCACCATT

WO 2004/030615

PCT/US2003/028547

2688/6881
FIGURE 2471

TCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAAACAAGCTTA
ACACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAATGTAAATGTGCTTAAATCTTTTGGCCCAGCTCCTACCTCCCAGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCCATAACCTACCTCAC
GGCAGTCTCCGCAGATGAGCCTACTGCCTCACAAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCACCTCCAGGCCCAGCCTCTGCCTCCCGT
CGGCCTCTACAATCCCAACATCTGCCTCACAGCAGATTCTTCAGGCCCAGCATCTGCCTCACTGTGGACCCCCCA
GACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTCCGCAGCCTCTCCAGGCCCAGCTCC
TCCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGGCTCTCGGCGGCCTTCCCAGGCCCCGCTTTTGA
CTTTTGGCGGCCTCTTCAGGCC

WO 2004/030615

PCT/US2003/028547

2689/6881
FIGURE 2472

TCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTA
ACACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCTGGCAGCCTCTCCAGGCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCCATACCCTACGTCAC
GGCAGTCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCAGCCTCTGCCTCCCGT
CGGCTCTACAGTCCCAACATCTGTCTCACAGCAGATTCTTCAGGCCAGCATCTGCCTCACTTGGACCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGGTGAAGCTCCTGCCTTTTCGGCAGCCTCTCCAGGCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTCCACCGAAAGTCCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCA

WO 2004/030615

PCT/US2003/028547

2690/6881
FIGURE 2473

ATGTTGCCAATAACACAGATGAAGAGACTGGGGGATGGCACTATCACTGCTGCTGTACTGAAGGTTAGCAAAGGT
GCTAATCCAGTGGAATCAAGAGAGGTGTGATGTTAGCTGTTGATGCTGTAATTGCTGAACTTAAAAAGCAGTCT
AAACCTGTGACCAAACCTGAAGAAATTGCACAGGTTGCTACAATTTCTGCAAAATGGAGACAAAGAAATTGGTAAC
ATCATCTCTGATGCAATGAAAAAGTTTGGAAAGAAAGGGCATCATCACAAAAATTTCTAGTGTCCAGTCCATTGTA
ACTGCTCTTGAAATTGCCAATGCTTACTGTAAGCCTTTGGTCATAATTGCTGGAGACATTGATGGAGAAGCTCTA
ACTACACTCATCCTGAATAGGCTAAAGGTTGGTCTTCAGGTTGTGGCAGTCAAAGCTCCAGGGTTTGGTGACAAT
AGAAAGAACCAGCTTAAAGATACGGTTATTGCTACTGGTGGAGAAGTTGGAGAGGTCAGTGTGATCAAAGATTAT
GCCATGCTCTTAAAAGGAAAAGGTAACAAGTCTCAAATTGAAAAATGTGTTCAAGAAATCATTGACCAGTCAGAT
GTCACAACTAGTGAATACGAAAAGGAAAACTGAGTGGAGAACTTTTCAGATGGAGTAGCTGTGCTGAAGCTAAT
GAAGATAAAATAATTGGTATAGAAATTATTAAGAAGAACTCAAAATTCAGCAATGACAATTGCTAAGAATGCA
GGTGTGATGGATTTTTGATAGTTGAGAAAATTATGTAA

WO 2004/030615

PCT/US2003/028547

2691/6881
FIGURE 2474

MLPITQMKRLGDGTITA AVLKVS KGANPVEIKRGV MLAVDA VIAELKKQSKPVTKPEEIAQVATISANGDKEIGN
IISDAMKKFGRKGIITKISSVQSIVTALEIANAYCKPLVIIAGDIDGEALTTLILNRLKVGLQVVAVKAPGFGDN
RKNQLKDTV IATGGEVGEVTVIKDYAMLLKGKGNKSQIEKCVQEIIDQSDVTTSEYEKEKLSGETFRWSSCAEAN
EDKIIIGIEI IKRTLKIPAMTI AKNAGVDGFLIVEKIM

WO 2004/030615

PCT/US2003/028547

2692/6881
FIGURE 2475

ATGTACTGGGACATCGTGTCTTTGGAGACAGCTATACCCCACTTGTCCATTCTGCTGAGGCCACAAATGCCATC
ACCCAGAAGCCCTTCACATCCACTGGGGCCACAGCAGGATACAGTCTGTTGCTGGTCCAGCAGCCTGATAAAATC
ATTGTCTCTCCACCCCTGATTCTTACAGGAGACTACTCACCCCATACCTCAAAAACCTCTTCATGAGGATGGTG
ACCCAGCCATGAGGACCCCTCGCCATCCTTGCTGCCATTCTCTGGTGGCCCTGCAGGCCAGGCTGAGCCACTC
CAGGCAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCAGAAGTGGTTGTTTCCCTT
GCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGCG
TGCATTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTGA

WO 2004/030615

PCT/US2003/028547

2693/6881
FIGURE 2476

CTATAGAAGACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCCTGCCTAGCTAGAGGATCTGTGACCC
CAGCCATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCAGGCTGAGCCACTCCAGG
CAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCTTGCA
GGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGCCTGCTATTGCAGAATACCAGCGTGCA
TTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTTGAGCTTGCAGAA
AAAGAAAAATGAGCTCAAAATTGCTTTGAGAGCTACAGGGAATTGCTATTACTCCTGTACCTTCTGCTCAATTT
CCTTTCCTCATCCCAAATAAATGCCTTGGTACAAGAAAAG

WO 2004/030615

PCT/US2003/028547

2694/6881
FIGURE 2477

MRTLAILAAILLVALQAQAEPLQARADEVAAPEQIAADIPEVVVSLAWDESLAPKHGSRKNMACYCRIPACIA
GERRYGTCTIYQGRLWAFCC

WO 2004/030615

PCT/US2003/028547

2695/6881
FIGURE 2478

CCTTGCTATAGAAGACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCCCTGCCTAGCTAGAGGATCTGT
GACCCCAGCCATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCCAGGCTGAGCCACT
CCAGGCAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCT
TGCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGC
GTGCATTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTTGAGCCTTG
CAGAAAAAGAAAAATGAGCTCAAAATTTGCTTTGAGAGCTACAGGGAATTGCTATTACTCCTGTACCTTCTGCTC
AATTTCTTTCTCATCTCAAATAAATGCCTTGTTAC

WO 2004/030615

PCT/US2003/028547

2696/6881
FIGURE 2479

MRTLAILAAILLVALQAQAEPLQARADEVAAAPEQIAADIPEVVVSLAWDESLAPKHGSRKNMDCYCRIPACIA
GERRYGTCTIYQGRLWAFCC

WO 2004/030615

PCT/US2003/028547

2697/6881
FIGURE 2480

ATGCAGGTCTGCAACTGCAGGTGCCTCTCACCTGGTGACCTGCAGGAAGATGGAGGAGCATATTGGGCACAGTGC
TCGGTTTGGGGGGCGCACTTCGACCCGGAAGTTTACCTAGACAAGCTGCATAGAGTGTGCCCTCTGGCCCAGCTG
ATGGACAGTGAGACGGACATGGTGCGGCAGATCCGGGCTATAGACAGCGACATGCAGACCTGGTCTATGAGAAC
TACGACAAGGAGACTATCGGGGTGCAACCTGGCTGGGGCGGGGAGGAGGTGCAGGGCCTGGCCAGAGCGGGCCTG
GCCACGGGCAAGGGACAGCGACCGCTGGGCCAGGACAGGTGAGAGCGGCGCAGTCCCGGGCCCGGCGTGTCGCG
GCTGCGCGGGAGAGGCCAGCAGAGGGCGCCAGAGAGCCAGGAGCGGCCCCGCGAGGAGCCCGGCCAGCCGGATG
CCCAGCTCCGCGCCGCGCGGACCCAAACGAGCCCGCGCTCAGACGCCCCAGCTCCGCCGAGAGGCCGCTCGCGCCG
GGCAGAGCCCCCTGGAGCCATGGCCAGCCCTTCCGGCAGCTCCGAAGCCACTGGCAAGCCCCGAGGCAGGGATGGC
CGGCCCAGGAGGGAGGAGGACGACGTCCCTCCCGAAGAGAAGAGGCTACGGCTGTTGCTGGAGGGGGGAAGCGCA
CAGCCCGAGGACTGCGAGGACGGGGAGGACGCGCTGCGGCCGGGCAGGGAGGAGACCGGCACCTTAG

WO 2004/030615

PCT/US2003/028547

2698/6881
FIGURE 2481

MQVCNCRCLSPGDLQEDGGAYWAQCSVWGAHFDPEVYLDKLHRVCPLAQLMDSETDMVRQIRAIIDSDMQTLVYEN
YDKETIGVQPGWGGEVQGLARAGLATGKGQRPPGPGQVRAAQSRARRVRAARERPAEGAREPGAARGGARASRM
PSSAPRGPNEPALRRPSSAERPLAPGRAPGAMASPSGSSEATGKPRGRDGRPRREDDVPPEEKRLRLLEGGSA
QPEDCEDGEDALRPGREETGT

WO 2004/030615

PCT/US2003/028547

2699/6881
FIGURE 2482

GAGAGTCGCGCCCGGGAGTCCGCCGCCTGCGCCAGGATGGAGTTCGTGAAATGCCTTGGCCACCCCGAAGAGTTC
TACAACCTGGTGCGCTTCCGGATCGGGGGCAAGCGGAAGGTGATGCCCAAGATGGACCAGGACTCGCTCAGCAGC
AGCCTGAAAACCTTGCTACAAGTATCTCAATCAGACCAGTCGCAGTTTCGCAGCTGTTATCCAGGCGCTGGATGGG
GAAATGCGCAACGCAGTGTGCATATTTTATCTGGTTCTCCGAGCTCTGGACACACTGGAAGATGACATGACCATC
AGTGTGGAAAAGAAGGTCCCGCTGTTACACAACCTTTCACCTTTTCCTTTACCAACCAGACTGGCGGTTTCATGGAG
AGCAAGGAGAAGGATCGCCAGGTGCTGGAGGACTTCCCAACGATCTCCCTTGAGTTTAGAAAATCTGGCTGAGAAA
TACCAAACAGTGATTGCCGACATTTGCCGGAGAATGGGCATTGGGATGGCAGAGTTTTTGGATAAGCATGTGACC
TCTGAACAGGAGTGGGACAAGTACTGCCACTATGTTGCTGGGCTGGTCGGAATTGGCCTTTTCCCGTCTTTTCTCA
GCCTCAGAGTTTGAAGACCCCTTAGTTGGTGAAGATACAGAACGTGCCAACTCTATGGGCCTGTTTTTGCAGAAA
ACAAACATCATCCGTGACTATCTGGAAGACCAGCAAGGAGGAAGAGAGTTCTGGCCTCAAGAGGTTTGGAGCAGG
TATGTTAAGAAGTTAGGGGATTTTGCTAAGCCGGAGAATATTGACTTGGCCGTGCAGTGCCTGAATGAACCTTATA
ACCAATGCACTGCACCACATCCCAGATGTCATCACCTACCTTTGAGACTCAGAAAACCAGAGTGTGTTTTAACTTC
TGTGCTATTCCACAGGTGATGGCCATTGCCACTTTGGCTGCCTGTTATAATAACCAGCAGGTGTTCAAAGGGGCA
GTGAAGATTCGGAAGGGCAAGCAGTGACCCTGATGATGGATGCCACCAATATGCCAGCTGTCAAAGCCATCATA
TATCAGTATATGGAAGAGATTTATCATAGAATCCCGACTCAGACCCATCTTCTAGCAAAAACAAGGCAGATCATC
TCCACCATCCGGACGCAGAATCTTCCCAACTGTCAGCTGATTTCCCGAAGCCACTACTCCCCATCTACCTGTCTG
TTTGTCTATGCTTTTGGCTGCCCTGAGCTGGCAGTACCTGACCACTCTCTCCAGGTAACAGAAGACTATGTTTCAG
ACTGGAGAACACTGATCCCAAATTTGTCCATAGCTGAAGTCCACCATAAAGTGGATTTACTTTTTTTCTTTAAGG
ATGGATGTTGTGTTCTCTTTATTTTTTTCTTACTACTTTAATCCCTAAAAGAACGCTGTGTGGCTGGGACCTTTA
GGAAAGTGAATGCAGGTGAGAAGAACCTAAACATGAAAGGAAAGGGTGCCCTATCCCAGCAACCTGTCTTGTG
GGTGATGATCACTGTGCTGCTTGIGGCTCATGGCAGAGCATTCAAGTGCCACGGTTTAGGTGAAGTCGCTGCATAT
GTGACTGTCATGAGATCCTACTTAGTATGATCCTGGCTAGAATGATAATTAAAAGTATTTAATTTG

WO 2004/030615

PCT/US2003/028547

2700/6881
FIGURE 2483

TCCGGCAACGCCAACCGCTCCGCTGCGCGCAGGCTGGGCTGCAGGCTCTCGGCTGCAGCGCTGGGCTGGTGTGCA
GTGGTGCAGCCACGGCTCACGGCAGCCTCAGCCACCCAGATGTAAGCGATCTGGTTCCCACCTCAGCCTCCCGAG
TAGTGGATCTAGGATCCGGCTTCCAACATGTGGCAGCTCTGGGCCCTCCCTCTGCTGCCTGCTGGTGTGGCCAAT
GCCCCGAGCAGGCCCTCTTTCCATCCCCTGTGGATGAGCTGGTCAACTATGTCAACAAACGGAATACCACGTGG
CAGGCCGGGCACAACCTTCTACAACGTGGACATGAGCTACTTGAAGAGGCTATGTGGTACCTTCCTGGGTGGGCCC
AAGCCACCCAGAGAGTTATGTTTACCGAGGACCTGAAGCTGCCTGCAAGCTTCGATGCACGGGAACAATGGCCA
CAGTGTCCACCATCAAAGAGATCAGAGACCAGGGCTCCTGTGGCTCCTGCTGGGCCCTTCGGGGCTGTGGAAGCC
ATCTCTGACCGGATCTGCATCCACACCAATGCGCACGTGAGGCTGGAGGTGTGGCGGAGGACCTGCTCACATGC
TGTGGCAGCATGTGTGGGGACGGCTGTAATGGTGGCTATCCTGCTGAAGCTTGGAACCTTCTGGACAAGAAAAGGC
CTGGTTTCTGGTGGCCTCTATGAATCCCATGTAGGGTGACAGCCGTAATCCCTCCCTGCTGAGCACCACGTC
AACGGCTCCCGGCCCCCATGCACGGGGGAGGAGATACCCCAAGTGTAGCAAGATCTGTGAGCCTGGCTACAGC
CCGACCTACAAACAGGACAAGCACTACGGATACAATTCCTACAGCGTCTCCAATAGCGAGAAGGACATCATGGCC
GAGATCTACAAAACCGGCCCGTGGAGGGAGCTTTCTCTGTGTATTCCGACTTCCTGCTCTACAAGTCAGGAGTG
TACCAACACGTCACCGGAGAGATGATGGGTGGCCATGCCATCCGCATCCTGGGCTGGGGAGTGGAAGTGGCACA
CCCTACTGGCTGGTTGCCAACTCCTGGAACACTGACTGGGGTGACAATGGCTTCTTTAAATACTCAGAGGACAG
GATCACTGTGGAATCGAATCAGAAGTGGTGGCTGGAATTCCACGCACCGATCAGTACTGGGAAAAGATCTAATCT
GCCGTGGGCCCTGTCTGTGCCAGTCCTGGGGGCGAGATCGGGGTAGAAATGCATTTTATTCTTTAAGTTCACGTAAG
ATACAAGTTTCAGACAGGGTCTGAAGGACTGGATTGGCCAAACATCAGACCTGTCTTCCAAGGAGACCAAGTCCT
GGCTACATCCCAGCCTGTGGTTACAGTGCAGACAGGCCATGTGAGCCACCGCTGCCAGCACAGAGCGTCCTTCCC
CCTGTAGACTAGTGCCGTAGGGAGTACCTGCTGCCCCAGCTGACTGTGGCCCCCTCCGTGATCCATCCATCTCCA
GGGAGCAAGACAGAGACGCAGGAATGGAAGCGGAGTTTCTAACAGGATGAAAGTTCCCCATCAGTTCCCCCAG
TACCTCCAAGCAAGTAGCTTTCCACATTTGTACAGAAATCAGAGGAGAGACGGTGTGGGAGCCCTTTGGAGAA
CGCCAGTCTCCCAGGCCCCCTGCATCTATCGAGTTTGCAATGTCAACCTCTCTGATCTTGTGCTCAGCATGAT
TCTTTAATAGAAGTTTTATTTTTTCGTGCACTCTGCTAATCATGTGGGTGAGCCAGTGGAACAGCGGGAGACCTG
TGCTAGTTTTACAGATTGCCTCCTTATGACGCGGCTCAAAGGAAACCAAGTGGTCAGGAGTTGTTTCTGACCCA
CTGATCTCTACTACCACAAGGAAAATAGTTTAGGAGAAACAGCTTTTACTGTTTTTGAAAAATTACAGCTTCAC
CCTGTCAAGTTAACAAGGAATGCCTGTGCCAATAAAAGTTTTCTCCAACCTGA

WO 2004/030615

PCT/US2003/028547

2701/6881
FIGURE 2484

MWQLWASLCCLLVLANARSRPSFHPLSDELVNYVKNRNTTWQAGHNFYNVDMSYLRKLCGTFLGGPKPPQRVMFT
EDLKLPAFDAREQWPQCPTIKEIRDQSGSCSWAFGAVEAISDRICIHTNAHVSVEVSAEDLLTCCGSMCGDGC
NGGYPAEAWNFWTRKGLVSGGLYESHVGC RPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHY
GYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGHAI RILGWGVENGTPYWL VANSW
NTDWGDNGFFKILRGQDHC GIESEVVAGIPRTDQYWEKI

WO 2004/030615

PCT/US2003/028547

2702/6881
FIGURE 2485

CTGGGAAGCAGAGTGTCTGGATGGAACCTGAGCTGGGTCTCTGACTCACTTCTGACTTTAGTTTTTTCAAGGGGG
AACATGGCAAAGGTGTTTCAGTTTCATCCTTGTTACCACCGCTCTGATAATGGGCAGGGAAATTTGCGXXXXXXXXXX
XX
XX
XX
XX
AAACCTCTCCAGAGCCTAGCAGAATTTTCTGTTTATTGTGACATGTCCGATGGAGGAGGATGGACTGTAATTCAG
AGACGATCTGATGGCAGTGAAAACCTTTAACAGAGGATGGAAAGACTATGAAAATGGCTTTGGAAATTTTGTCCAA
AAACATGGTGAATATTGGCTGGGCAATAAAAACTTCACTTCTTGACCACTCAAGAAGACTACACTTTAAAAATC
GACCTTGCAGATTTTGAAAAAATAGCCGTTATGCACAATATAAGAAATTTCAAAGTTGGAGATGAAAAGAATTTT
TACGAGTTGAATATTGGGGAATATTCTGGAACAGCTGGAGATTCCCTTGCGGGGAATTTTCATCCTGAGGTGCAG
TGGTGGGCTAGTCACCAAAGAATGAAATTCAGCACGTGGGACAGAGATCATGACAACTATGAAGGGAACGCGCA
GAAGAAGATCAGTCTGGCTTGTGGTTTAAACAGGTGTCACTCTGCAAACCTGAATGGTGTATACTACAGCGGCCCC
TACACGGCTAAACAGACAATGGGATTGTCTGGTACACCTGGCATGGGTGGTGGTATTCTCTGAAATCTGTGGTT
ATGAAAATTAGGCCAAATGATTTTATTCCAAATGTAATTAAATTGCTGCTGTTGGGCTTTGTTTTCTGCAATTCA
GCTTTGTTTAAAGTGATTTGAAAAATACTCATCTGAACATATCCATGCGCAATCATGATAACTGTTGTGAGTAG
TGCTTTTCATTCTTCTCACTTGCCCTTTGTTACTTAATGTGCTTTTCAGTACAGCAGATATGCAATATTCACCAAT
AAATGTAGACTGTGTT

WO 2004/030615

PCT/US2003/028547

2703/6881
FIGURE 2486

MAKVFSFILVTTALIMGREISXXX
XXXXXXXXXXIFNDGYKLSGFYKIKPLQSLAEFSVYCDMSDGGGWTVIQRRSDGSENFNRGWKDYENGFGNFVQK
HGEYWLGNKNLHFLTQEDYTLKIDLADFEKNSRYAQYKNFKVGDEKNFYELNIGEYSGTAGDSLGNFHFPEVQW
WASHQRMKFSTWDRDHDNYEGNCAEEDQSLWFNRCHSANLNGVYYSGPYTAKTDNGIVWYTWHGWWYSLKSVVM
KIRPNDFIPNVI

WO 2004/030615

PCT/US2003/028547

2704/6881
FIGURE 2487

GGGACAGAGGAGACAAGATGGCGCTGCGGGCGATGCGGGGGATTGTCAACGGGGCCGCACCCGAGCTACCCGTGC
CCACCGGTGGGCCGGCGGTGGGAGCTCGGGAGCAGGCGCTGGCAGTCAGTCGGAACCTACCTCTCCCAGCCTCGCC
TCACATACAAGACAGTATCTGGAGTCAATGGTCCACTAGTGATCTTAGATCATGTTAAGTTTCCCAGGTATGCTG
AAATTGTCCATTTGACCTTACCGGATGGCACAAAGAGAAGTGGGCAAGTTCTGGAAGTTAGTGTTTCCAAGGCAG
TAGTTTCAGGTATTTGAAGGGACTTCAGGTATAGATGCTAAGAAAACGTCCTGTGAGTTTACTGGGGATATTCTCC
GAACACCGGTGTCTGAGGATATGCTTGGTCGGGTATTCAATGGATCGGGAAAAACCCATTGACAGAGGTCTGTGTTG
TACTGGCCGAAGACTTCCTTGATATCATGGGTGAGCCAAATCAACCTCAATGTCGAATCTACCCAGAGGAAATGA
TTCAGACTGGCATTTCGGCCATCGATGGGATGAACAGTATTGCTAGGGGGCAGAAAAATTCCTATCTTCTCTGCTG
CTGGGCTACACACAATGAGATTGCAGCTCAGATCTGTGCGCAGGCTGGTTTGGTAAAGAAATCCAAAGATGTAG
TAGACTACAGTGAGGAAAAATTTGCAATTGTATTTGCTGCTATGGGTGTAAACATGGAACTGCCCGGTTCTTCA
AATCTGACTTTGAAGAAAATGGCTCAATGGACAATGTCTGCCCTCTTTTGAACTTGGCTAATGACCCAACCATTG
AGCGAATTATCACTCCTCGCCTGGCTCTAACCACAGCTGAATTTCTGGCGTACCAATGTGAGAAAACATGTATTGG
TTATTCTAACAGACATGAGTTCTTATGCTGAAGCACTTCGAGAGGTTTCAGCAGCCAGGGAAGAGGTACCTGGTC
GACGAGGTTTTTCAGGTTACATGTATACAGATTTAGCCACGATATATGAACGCGCTGGGCGAGTGGAAGGGAGAA
ACGGCTCGATTACTCAAATCCCTATTCTAACCATGCCTAATGATGATATCACTCACCCCATCCAGACTTGACTG
GCTACATTACAGAGGGGCAGATCTATGTGGACAGACAGCTGCACAACAGACAGATTTATCCACCTATCAATGTGC
TGCCCTCACTATCACGGTTAATGAAGTCTGCTATTGGAGAAGGGATGACCAGGAAGGATCATGCCGATGTATCTA
ACCAGCTAGTATGCGTGCTATGCTATTGGAAAGGATGTGCAAGCCATGAAAGCTGTCGTTGGAGAAGAAGCCCTT
ACCTCAGATGATCTTCTCTACTTGGAAATTTCTGCAGAAGTTTGAAGGAACTTCATTGCTCAGGGTCCTTACGAA
AATCGCACTGTCTTTGAGACTTTGGACATTGGCTGGCAGCTACTCCGAATCTTCCCCAAAGAAATGCTGAAGAGA
ATCCCTCAGAGCACCCCTCAGCGAATTTTACCCTCGAGACTCTGCAAAGCATTAGCTGCTGCTTCTGCATTGCTCC
GCGCTCTTGTGAAATACTGGTTCTGTTTTCTTTATTCCTTTTGCACTCTCGGTTCCCACCTTTGTGTTGGAGTTT
ACCATGTTACCCTGTAATTAAAAACAAAGAAATAGGTAACATATTGTGCCAGTGTTGCAACGTTTTAACTGCTAA
CAGACCTTAAATATCCCCCTACCTGGGTCCTCAGTGCTATGTTTAAAGTGCTGCAGGGATGGAGTGGCGTTTTT
TTATTGCTGTATGTATTGTACATAGTGGAGTAGTTAGTTACCTGATAACAGTCTTGTTATTTGGGTCTCTTAGAC
CTTACCTCTCAACTCCCTCAAGAGTACCAGTCTCTGAAGTTATAATGCTTTGGTCTCTACATTAGGGGCAAGATC
CAGTCTGAGAGAAGTCTCCTTTGAGAAGGGCCAAGAGGCTCTTTCCTGAGTGTTTGCTTTTGGTTTGTGTTGATG
CCTGTATTGCTGGGCTGTGCTGCTGCTCGAAGCAGATGGTTTGAAGTGTCTTTTGTCTTTTCTATATAATGAA
TAGATGAGTGAAAGGAGTTTTCTTTTTCTTTTAGTACTTACGTATTGGGATTCCCTGTGCTTTACAGCTCTCCCT
CTCCAAATAATACACAGAATCCTGCAACTTTTGCACAGCTGGTATCTGTCTGGTAGCAGTGAGACCCCTTGTCT
TGGTGATCCTTACTGGGTTTCCAAGCAGAGGAGTCACATGATTACAATTGCCAGTAGAGTTGTTGTTTGGGGTAC
AAGATGAGAAGAAAGAAAACCTACAGCCTTTCTACATTCTGACATGCTAACAGTGGTTTAAAGTTTCTAAAGTGT
TTACCAGATGCTGAAGGCAAGGGGAGGGAGCAGAAGCACTTATGTTTACGGATATTTTAACTCTGTTAGAGAGC
AGCCTTTGAAAATCCCCAATTTGGTTCTGCTTTTTGACCTCTCTCTACCTTTTCAGGGTAATCTTTGTGGCACAA
ACGATAGCATTTCGAAGCTTTAGAGTTTTCTGAATTC

WO 2004/030615

PCT/US2003/028547

2705/6881
FIGURE 2488A

CTGGCCGGGAGGCTGGAGCCAGCAGCAGCGCGGGCGCGCGGCGTCTGCCAACTTGCAGGCGCGGAGGGACCC
CTGACATTTTACTAAAATGAGCGTGCTCAGCAGGAAGAGATGTGTTCTCACGCTAGAAGCCACCCCGTCACATG
TAGTGGTGTCCCGTTTAAATGATTCTGACATGGATTATGAAAGGCCAAACGTAGAGACCATCAAGTGC GTTGTGG
TGGGGGACAACGCCGTGGGTAAGACCAGGCTCATCTGTGCCGCGCTTGCAATGCCACCCCTACCCAGTACCAGC
TGCTGGCCACGCATGTGCCACAGTATGGGCCATCGACCAATATCGTGTGTGCCAGGAGGTGCTGGAACGCTCCC
GAGACGTGGTAGATGATGTGAGCGTCTCTGTGCGCCTCTGGGACACCTTTGGAGACCACCACAAAGACCGTCTGCT
TTGCTTATGGGAGATCTGATGTGGTGGTTCTGTGCTTCTCCATTGCCAACCCCAATTCCCTCCACCATGTCAAGA
CCATGTGGTACCCAGAAATCAAGCACTTCTGCCCCCGAGCACCTGTCTATCTTGGTGGGCTGCCAGTTGGACCTGC
GCTACGCTGACCTGGAGGCTGTCAACAGGGCTAGGCGACCCCTTGGCTAGGCCCATCAAACCTAATGAAATCCTGC
CCCCAGAGAAGGGTCGGGAGGTGGCCAAGGAGCTGGGCATCCCTACTATGAGACCAGCGTGGTGGCCCGAGTTCCG
GCATCAAGGACGTCTTTGACAACGCCATCCGAGCTGCACTCATCTCCCGCCGCCACCTGCAGTTTCTGGAAGTCCC
ACCTCCGCAATGTGCAGCGGCCTCTGCTGCAGGCACCTTCTTACCCCCAAGCCACCGCCCCGATCATCGTGG
TGCCCGACCCCTCCCTCCAGCAGCGAGGAGTGCCCCGCCACCTCCTGGAGGACCCGCTCTGCGCGGACGTATCC
TGGTGTGTCAGGAGCGGGTGCGCATCTTTGCCACAAGATCTACCTCTCCACCTCCTCTCCAAGTTCTATGACC
TGTTCTCATGGACCTGAGTGAGGGGGAGCTGGGGGGCCCCCGGAGCCAGGGGGCACCCACCCAGAGGACCACC
AGGGCCACTCTGATCAACACCACCACCATCACCACCACCACCATGGGCGAGACTTCTGTCTCCGAGCAGCCAGCT
TTGACGTGTGCGAGAGCGTGGATGAGGCTGGGGGCTCCGGTCTGTGCTGGCTCCGTGCTTCCACCAGCGACGGGA
TCTTACGGGGCAACGGAACAGGGTACCTACCGGGCAGGGGTCTGTGTGCTGTCTTCTTGGAGCCGAGCTTTTGTGA
GCATCCAGGAAGAGATGGCAGAAGATCCTCTCACCTACAAATCCCGGCTGATGGTGGTGGTGAAGATGGACAGTT
CCATCCAGCCGGGGCCCTTCCGGGCTGTCTCAAGTACCTGTACACGGGGGAGCTAGATGAGAACGAGCGTGACC
TCATGCACATTGCCACATTGCTGAGCTGCTCGAGGTCTTTGATCTGCGCATGATGGTGGCCAACATTCTCAACA
ATGAGGCCTTCATGAACCAGGAGATCACCAGGCCTTCCACGTCCGCCGGACCAACCGGGTTAAGGAGTGCTTGG
CAAAGGCACCTTCTCAGATGTGACCTTCATCTGGATGATGGCACCATCAGCGCCCAAGCCCTGTTGATTT
CCAGCTGTGACTGGATGGCTGCCATGTTTGGGGGGCCATTTGTGGAGAGCTCCACCCGGGAGGTGGTGTTCCT
ACACAAGCAAGAGCTGCATGCGGGCCGTGCTGGAATACCTCTACACCGGCATGTTACCTCCAGCCCCGACCTGG
ATGACATGAAGCTCATCTTCTAGCCAACCGCTCTGCTGCCACACCTGGTTGCCCTCACAGAGCAGTACACAG
TGACCGGGCTGATGGAAGCGACCCAGATGATGGTGGACATCGATGGGGACGTCTTGTGTTCTTGGAACTGGCTC
AGTTCCACTGTGCGTACCAGCTGGCCGACTGGTGTCTCCACCACATCTGCACCAACTACAACAAGCTGTGCCGCA
AGTTCCCCCGAGACATGAAGGCCATGTCCCCAGAAAACAGGAGTATTCGAGAAGCATCGGTGGCCACCTGTGT
GGTACCTGAAGGAGGAAGATCATTACCAGCGGGCAGGAAGGAGCGTGAGAAGGAGGACTACCTCCACCTCAAGC
GGCAGCCCAAACGGCGTTGGCTCTTCTGGAACAGTCCATCTCTCCCGTCTTCTCTGGCAGCTCTCTCTCATCCC
CATCTTCTCTCTCGGCTGTGGTCTGAGATGCTGCCACCTCTTCTGACCTGCTGCTGTGTGTCTTCCCATCCGCTT
CACCCTCTGCTCTTCCGCATACCCCATCCACCTTACAGGGACCCAGGGGGCCACGTAACCAGGACCCAGAGGG
TGGAGCTCTTCTTACCAGCCACCGTGGCTCAGCCAGAGAGGAGCTGAGCCCTGTGGAGCAGAACGGGAACCACCT
GCAGAGGTCCCCAGACCCAAAGCAGGACGGGAGACAACCTGCTTGGAGGAGCGAAGAGCCCTGGCATTATCTCT
GGGTTTGAGAGCCCTAGAGTCAAAGGGAAAGCCTCCAGCCTCCAGGGCTTCTCTGTGTGTCTTGGTTGCTGCTC
TGGCCAGGGAGGCAGCCCCACTCCCAGCAAGCAGAAGTGATCCTCGAGGGTCTGCCCCCTGTTGGCCATATCTTT
CCACCGACGGACTTGAGTGTGTCATTTGTTTTGTGGGCATTTCCACACGAAGCCTACTCACACCCTCACTGGAGA
AGTCAGGGTAGAAATTGAGCCTTCAGAGCCCAACTCAAGGCTTCTACATCCTGGGGTGCAGCTGCAAAAGGCCAG
ACGTGGAAGGCTGTATCCTGCCAGTGTCCCTCCGTCCAGGGGGCTGTGCTGGCACAGACCTGAGAATGGGGA
CACAGGTCATTGAGCTCCAGGCCTGGAAGCAGTGCTCTTGGTGCAACAAGAACTTCTCCCTACCCCCCTCC
TTTACCCTCAGATTTGGAGATGGTAACCAAGGAAGCAGCTGGGACAGGTGGAGAAGGAAGTAGGAATGAGTGCA
CGGCGACCCCGTGTCTCTCAGGGCCCTCCCTGCTCTGGGTGGCACTGCTTTTTATAGGGTGGGGCAAAATTAG
CAAAAAACAACCAATGACAACCAAACTGAAACCGAAACGAAAAATCAACAAACACTCTGTCTCTATCCCTC
CAAAGAATGAAATCAGAAAAAGCCCTGCTAGCTCACATTTCTATAAACAGAGGCCCCCATGATGAGGAGGTG
AAGATTTAGGTTGCAGAATCGACTCCAATGCCTTTTCAAGAAAGGACTCGGCACTTCTCTGACTGCGGAGGCCCTG
ACCCTGCCAGCTGGCTCCGAGGGCAACACAGGGGCTGGCTCTAGAGGGCTGGTGATTGAGGGGGCCGGGCTGG
CGGCAAGAGGGGTTTGGTCTCGGGGCTTAAATGGCACCAGACTCTTGCTTTTGGCCATCTGGAGACTGCAGGCT

WO 2004/030615

PCT/US2003/028547

2706/6881
FIGURE 2488B

CCCTTCCTTACCCTCAGAGAGTGCTTATGGTGGGTGTTTTTGCGGGGCTGCAATAGGGGCCAAAAGTCAGGGAAA
GGGGCACTGACCTGTAGTGAAAGGCCACAGGACACAGCCTTATTACTGCTGGGGTGGGATAAGGGGAAGGAGAAG
AGGGAGAATGGAGCAGGAGGAAAAGCAGAGTTGGTCTAGAGAGGAGGAGGGCGGGGCTGGAGGAATGTGGGGGAT
TGAAACTAGCTCCCAGCCCCCATGGGGCAGCAGCTGGGCCACAATTGCCCTTTCCGTTTTCTAACCCCGACTCA
GATTTACACCACCCACACTCTTTTTAGGTGTAAAAGATGGAGTCCACGGAGGAGGGGCAGAGCCAGGAGGCAGTG
GGGCTGTGGGGCTCAGAGCTCAGGAGTCGCCTTACCTGAGAGAGATGTTCTAGCTGAGAGGGCCTGGCCCTGGGGT
GGGCTCCAGGAAAACGCTGGTTAGGCCTGGGATTGAGCTAACCTGAAACAAAAGGTAGTAGGCAGGACCTAATGAC
CAGAGGTTAAATCCTCATCAAGAGAGACCAGGCGGCTGGAGGACAAGCGGCTCTAACCTGGGGGCGGCCATGTT
GTCCAGGCCCAGGCCCCCTCCAGGACTGTGGCTGCCTCCCCCTCCACGGCCTCCAGGGCGGCTGGCTGGAAAGCCAC
GCGTATGCTGCCCTCTACAGGCTGCTCGGCCTCCCTGCAGCTCAGCGCAGCCCAGGGCTCCAAGTGAGGCCCAGA
AGCCCATGGGCAGGGCTGGGGGGACGAAGGGGGAACCCGAGCACCTCCACTTCTAGGGAAGATGGACAGCGTGG
GGGCACACCTGGGCCCTCCCGGAAGCTGTGGACGAAAGGGAGAGCGGGTCTCCAGGGCAAGGGGAACGGGAAATA
GGTCTCCTAGGTGCCGTGAAGCGCTGAGCAACCTGGGTACCCTGGTGGGGATGCAGGGAAGGCCGGGGCAGAGAAA
GCGAAGGTCGACCCAGGGCTGTAGGAAGCCATAGGAGAGTGACCACGGGATTCCCTGAGAAACAGGGCCGGCCCC
CCAATTTCAGGGACCCACCGCCCATTCCTCCGAGAGCTGTCGGAACCAGATGCAACCCGGCAGCCCAGAGAACTCT
CCTGGGAGGCTGTGGGTGAGCCAGGCCAACATTGGTGTCCCTGTCCCCAGAGGGAGGAGCAGGCAGGAGAGAGAG
GGGAAGGAGGTATGAATCCCAGTCCCCAGGAACCTAGCTCTTTAACTCTGGGGAGTCGGATTACGAAACACCC
CCAGGAGGCCAAGCCTGAAAACAGAGGGGAGGGAGGAAGGAAGGAGTCCAGCAGGAGCACAGCCCTGGTTTCCT
GTCACCTCAGAGCTGATTCACAGGAGGAGGGGAGGTTGGGGGGCGGGAGACAAAAACCACACCTCTTTTATATAA
GGTTTCATATTTAATTTGGTCATGGATTCAATAATACATAAGTATTTTGTAC

WO 2004/030615

PCT/US2003/028547

2707/6881
FIGURE 2489

MDSDMDYERP NVETIKCVVVGDNVAGKTRLICARACNATLTQYQLLATHVPTVW AIDQYRVCQEV LERSRDVDD
VSVSLRLWDTFGDHHKDRRFAYGRSDVVVLCFSIANPNSLHHVKT MWYPEIKHFCPRAPVILVGCQLDLRYADLE
AVNRARRPLARPIKPNEILPPEKGREVA KELGIPYYETS VVAQFGIKDVFDNAIRAALISRRHLQFWKSHLRNVQ
RPLLQAPFLPPKPPPIIVVPDPPSSSEEC PAHLLDPLCADVILVLQERVRIFAHKIYLSTSSSKFYDLFLMDL
SEGELGGPSEPGGTHPEDHQGHSDQH HHHHHHHHGRD FLLRAASFVCE SVDEAGGSGPAGLRAS TSDGILRGNG
TGYPGRGRVLSSWSRA FVSIQEEMAEDPLTYKSRLMVVVKMDSSI QPGPFRAVLKYLYTGELDENERDLMHIAH
IAELLEVF DLRMMVANILNNEAFMNQEITKAFHVRRTNRVKECLAKGTFSDVTFILDDGTISAHKPLLISSCDWM
AAMFGGPFVESSTREVVFPYTSKSCMR AVEYLYTGMFTSSPDLD DMKLIILANRLCLPHLVALTEQYTVTGLME
ATQMMVDIDGDVLVFL ELAQFHCA YQLADWCLHHICTN YNNVCRKFPRDMKAMSPENQEYFEKHRWPPVWYLKEE
DHYQRARKEREKEDYLHLKRQPKRRWLFWN SPSSPSSSAASSSSPSSSSAVV

WO 2004/030615

PCT/US2003/028547

2708/6881
FIGURE 2490A

GGTCTCAGCTGAGTCTGCTCTGATCACCCAACAAGACCTAGCTCCCCAGCAGAGAGCGGCCCCACAACAAAAGAG
GTCCAGCCCCCTCAGAGGGATTGTGTCCACCTGGACACCATATCTCAGAAGACGGTAGAGATTGCATCTCCTGCAA
ATATGGACAGGACTATAGCACTCACTGGAATGACCTCCTTTTCTGCTTGCCTGACACAGGTGTGATTACAGGTGA
AGTGGAGCTAAGTCCCTGCACCAGCAGCAGAAACACAGTGTGTGTCAGTGCAGAAAGGCACCTTCCGGGAAGAAGA
TTCTCCTGAGATGTGCCGAAGTGCCGCACAGGGTGTCCCAGAGGGATGGTCAAGGTCGGTGATTGTACACCCTG
GAGTGACATCGAATGTGTCCACAAAGAATCAGGTACAAAGCACAGTGGGGAAGCCCCAGCTGTGGAGGAGACGGT
GACCTCCAGCCCAGGGACTCCTGCCTCTCCCTGTTCTCTCTCAGGCATCATCATAGGAGTACAGTTGCAGCCGT
AGTCTTGATTGTGGCTGTGTTTGTGCAAGTCTTTACTGTGGAAGAAAGTCCTTCTTACCTGAAAGGCATCTG
CTCAGGTGGTGGTGGGACCCCTGAGCGTGTGGACAGAAGCTCACAACGACCTGGGGCTGAGGACAATGTCTCTCAA
TGAGATCGTGAGTATCTTGCAGCCCACCCAGGTCCCTGAGCAGGAAATGGAAGTCCAGGAGCCAGCAGAGCCAAC
AGGTGTCAACATGTTGTCCCCGGGGAGTCAGAGCATCTGCTGGAACCGGCAGAAAGCTGAAAGGTCTCAGAGGAG
GAGGTGTCTGGTTCCAGCAAATGAAGTGATCCCACTGAGACTCTGAGACAGTGCTTCGATGACTTTTGCAGACTT
GGTGCCCTTTGACTCCTGGGAGCCGCTCATGAGGAAGTTGGGCCTCATGGACAATGAGATAAAGGTGGCTAAAGC
TGAGGCAGCGGGCCACAGGGACACCTTGACACGATGCTGTATAAAGTGGGTCAACAAAACCGGGCGAGATGCCTC
TGTCACACCCCTGCTGGATGCCTTGGAGACGCTGGGAGAGAGACTTGCCAAGCAGAAGATTGAGGACCACTTGTT
GAGCTCTGGAAGTTTCATGTATCTAGAAGGTAATGCAGACTCTGCCATGTCTTAAGTGTGATTCTCTTCAGGAAG
TCAGACCTTCCCTGGTTTTACCTTTTTTCTGGAAAAAGCCCAACTGGACTCCAGTCAGTAGGAAAGTGCCACAATT
GTCACATGACCGGTACTGGAAGAACTCTCCCATCCAACATCACCCAGTGGATGGAACATCCTGTAACTTTTTAC
TGCACTTGGCATTATTTTTATAAGCTGAATGTGATAATAAGGACACTATGGAATGTCTGGATCATTCCGTTTTGT
GCGTACTTTGAGATTTGGTTTGGGATGTCATTGTTTTTACAGCACTTTTTTATCCTAATGTAAATGCTTTATTTA
TTTATTTGGGCTACATTGTAAGATCCATCTACACAGTCGTTGTCCGACTTCACTTGATACTATATGATATGAACC
TTTTTTGGGTGGGGGGTGCAGGGCAGTTCACTCTGTCTCCCAGGCTGGAGTGCAATGGTGCAATCTTGGCTCACT
ATAGCCTTGACCTCTCAGGCTCAAGCGATTCTCCACCTCAGCCATCCAATAGCTGGGACCACAGGTGTGCACC
ACCACGCCCCGGCTAATTTTTTGTATTTTGTCTAGATATAGGGGCTCTCTATGTTGCTCAGGGTGGTCTCGAATTC
CTGGACTCAAGCAGTCTGCCACCTCAGACTCCCAAGCGGTGGAATTAGAGGCGTGAGCCCCATGCTTGGCCT
TACCTTTCTACTTTTATAATTCTGTATGTTATTTTATGAACATGAAGAACTTTAGTAAATGTACTTGTTTA
CATAGTTATGTGAATAGATTAGATAAAACATAAAAGGAGGAGACATACAATGGGGGAAGAAGAAGTCCCCGTGT
AAGATGTCACTGTCTGGGTTCAGCCCTCCCTCAGATGTACTTTGGCTTCAATGATTGGCAACTTCTACAGGGGC
CAGTCTTTTGAACGGACAACCTTACAAGTATATGAGTATTATTTATAGGTAGTTGTTTACATATGAGTCGGGAC
CAAAGAGAACTGGATCCACGTGAAGTCTGTGTGTGGCTGGTCCCTACCTGGGCAGTCTCATTGACCCCATAGC
CCCCATCTATGGACAGGCTGGGACAGAGGCAGATGGGTTAGATCACACATAACAATAGGGTCTATGTCTATATCCC
AAGTGAACCTTGAGCCCTGTTTGGGCTCAGGAGATAGAAGACAAAATCTGTCTCCACGTCTGCCATGGCATCAAG
GGGGAAGAGTAGATGGTGTCTGAGAATGGTGTGAAATGGTGGCATCTCAGGAGTAGATGGCCCGGCTCACTTCT
GGTTATCTGTACCCCTGAGCCCATGAGCTGCCTTTTAGGGTACAGATTGCCTACTTGAGGACCTTGGCCGCTCTG
TAAGCATCTGACTCATCTCAGAAATGTCAATTCTTAAACACTGTGGCAACAGGACCTAGAATGGCTGACGCATTA
AGGTTTTCTTCTGTGTCCTGTTCTATTATTGTTTTAAGACCTCAGTAACCATTTTCCAGCCTTTTCCAGCAAACC
CTTCTCCATAGTATTTTCACTCATGGAAGGATCATTATGCAGGTAGTCATTCCAGGAGTTTTTGGTCTTTTTCTGT
CTCAAGGCATTGTGTGTTTTGTTCCGGGACTGGTTTGGGTGGGACAAAGTTAGAATTGCCTGAAGATCACACATT
CAGACTGTTGTCTGTGGAGTTTTAGGAGTGGGGGGTGACCTTTCTGGTCTTTGCACTTCCATCCTCTCCCACT
TCCATCTGGCATCCACGCGTTGTCCCTGCACCTCTGGAAGGCACAGGGTGTCTGCTGCCTCCTGGTCTTTGCCT
TTGCTGGGCCTTCTGTGAGGACGCTCAGCCTCAGGGCTCAGAAGGTGCCAGTCCGGTCCCAGGTCCCTTGTCCC
TTCCACAGAGGCCCTTCCTAGAAGATGCATCTAGAGTGTGAGCCTTATCAGTGTTTAAAGATTTTTCTTTTTATTTTT
AATTTATTTGAGACAGAATCTCACTCTCTCGCCAGGCTGGAGTGCAACGGTACGATCTTGGCTCAGTGCAACCT
CCGCTTCTGGGTTCAGCGATTCTCGTGCTCAGCCTCCGGAGTAGCTGGGATTGCAGGCACCCGCCACACGC
CTGGCTAATTTTTGTATTTTTAGTAGAGCGGGTTTTACCATGTTGGTCAAGGCTGGTCTCGAAGTCTGACCTC
AGGTGATCCACCTTGGCCTCCGAAAGTGCTGGGATTACAGGCGTGAGCCACCAGCCAGGCCAAGCTATTCTTTTA
AAGTAAGCTTCCCTGACGACATGAAATAATTGGGGGTTTTGTTGTTTAGTTACATTAGGCTTTGCTATATCCCCAG
GCCAAATAGCAITGTGACACAGGACAGCCATAGTATAGTGTGCTCACTCGTGGTTGGTGTCTTTTATGCTTCTGCC

WO 2004/030615

PCT/US2003/028547

2709/6881
FIGURE 2490B

CTGTCAAAGGTCCCTATTTGAAATGTGTTATAATACAAACAAGGAAGCACATTGTGTACAAAATACTTATGTATT
TATGAATCCATGACCAAATTAAATATGAAACCTTATAT

WO 2004/030615

PCT/US2003/028547

2710/6881
FIGURE 2491

CGGACGCGTGGGCAGGCAGCAGCCGGGCAGGGATGCTCCTGCGCTCCCGGGCGGCCTCGGGCCCAGCCACCTGCT
CGCCGGGGAAGAGGACACGCAGAGGAGCAGCTGGCTTGCCCGGAGTCTCCACCTTGACCCAAGCATGCAGGGC
CCACCCCGCAGCCTCCGCGCTGGGCTCAGCCTGGACGACTTCAATCCCTGGCCACCTCCAGTCCCACATAGGGTCT
TCCTCCCGGGGGACACGGGTGCCCGTGATCCGGAATGGTGGCTCCAACACCCTTAATTTCCAGTTCCACGACCCC
GCGCCCAGGACTGTGTGCAATGGGGGCTACACACCAAGACGAGATGCTTCCAGCACCCGGACCCCTGCGTGGTAT
CAGACCTGGCCAGGCCCTGGGAGCAAGCCCTCTGCAAGCACAAAGATCCCTGCCTCCCAGCACACCCAGAAGTGG
TCAGCCACGTGGACCAAGGACAGCAAGCGTCGGGACAAGCGCTGGGTCAAGTACGAGGGAATCGGGCCCGTGGAC
GAGAGCGGCATGCCCATTGCCCCCGATCCAGCGTTGACAGACCCAGAGACTGGTACCGGAGAATGTTCCAGCAG
ATTACCCGAAAATGCCAGACTTGCAGCTGGACTGGACCTTCGAGGAGCCACCCAGAGACCCAGGCATCTAGGA
GCCCAGCAAAGACCTGCCCACAGGCCCGGCCCGGCAACATCTTCCAGTGGAAGAAGCTGGGACCACTCTGAAGAG
TTACCTAGAAGCACCTTCAACTACAGACCTGGAGCATTCTCCACTGTGCTGCAGCCCTCAAATCAGGTGCTCAGA
CGCCGGGAAAAAGTAGACAATGTCTGGACGGAAGAGTCTTGAAGCAGTTTCTGCAGGAAGTACAGACTGGGCAG
AGGCCCAAGAAACCGCTGGTGGACGACCCCTGGTGAGAAGCCCTCCCAGCCATTGAGGTGCTGCTGGAGAGAGAG
CTGGCCGAGCTGAGCGCCGAGCTGGACAAGGACCTGCGGGCAATTGAGACCCGACTGCGCTCCCCAAGAGCTCG
CCGGCGCCCCGACGGGCCCCGGAGCAGCGGCCCGGCCCGGCCCTCAGCCTGGAGCTCCAGCTACCCACAT
GCACCTTACCTGGGTTCGCGCCGCTCCCTGAGTCCCCACAAAATGGCTGATGGAGGAAGCCCCCTCCTAGGTGCG
AGGGACTTTGTCTACCCTTCCTCAACCCGAGACCCCTAGTGCCTCTAACGGAGGGGGCAGCCAGCCAGGAGGGAA
GAGAAGAAGAGAAAGGCCGCCAGGCTCAAGTTTGAATTCAGGCGCAGTCCCCAAGGAGCTGACTCTGCAGAAG
GGTGACATTGTCTACATCCACAAGGAGGTGGACAAGAACTGGCTGGAGGGAGAGCACCACGGCCGCTGGGCATC
TTCCCTGCTAATTATGTGGAGGTGCTGCCCGCAGATGAGATCCCTAAGCCCATCAAGCCCCGACCTACCAGGTG
CTGGAGTATGGAGAGGCTGTGGCCAGTACACCTTCAAGGGGGACCTGGAGGTGGAGCTGTCTTCCGCAAGGGA
GAGCACATCTGCCTGATCCGCAAGGTGAACGAGAACTGGTACGAGGGACGCATCACGGGCACGGGGCGCCAAGGC
ATATTCCCTGCCAGCTACGTGCAGGTGTCTCGTGAACCCCGGCTCCGGCTCTGTGACGACGGCCCCCAGCTCCCC
ACGTCTCCCCGCCTGACCGCTGCCGCCGCTCAGCCCGTACCCAGCTCCCCCTCAGCCCTGCGCAGCCAGCT
GACCCACCCGACTTGGGGGGACAGACCTCCCCCGTGCAGTGGCTTCTCCTTCCCCACCCAGGAGCCTAGACCC
CAGACCCAGAATCTTGGCACCCCTGGTCCAGCTCTGTCCACTCTCGAGGTCCAGCCATCCCCTGGACCTGGGG
ACCTCCTCTCCTAACACCTCTCAGATACACTGGACCCCGTACCGGGCGATGTACCAGTACAGGCCCCAGAACGAA
GACGAGCTGGAGCTGCGCGAGGGGGACAGGGTGGATGTCATGCAGCAGTGTGACGATGGCTGGTTGTGGGTGTC
TCCCGGAGGACCCAGAAATTCGGAACGTTCCCTGGAAATTACGTTGCCCCGGTGTGAGTGGTCTCCATGGCAACT
TGGAGCCAGCCAGGATGGGGTGGGGAGCGGTGGCACTCGTGGGAGGGAGAGGACCCCGCCACATCCTCCTTCC
CCAGGACCTGAGCTCCAGCATCTGCAGACGACCCCGCAGCATTTCCCTCGGACCCCCCTCGAAGCCCCCTGGA
CTGATTCCACCCACGACTCACAGGCATTCTCCACAGCCCTTTCATTTCTTCCCCACCCCACTCCCCAAATAC
AGAGGTCTGCTTTGAAGCGGAGACCATTTCAGGCCCTTATTGAGACCAGACCCCAAGTCCCCACCCCATCCTG
CTCCAGCGTTTCTCTAACAGGGACCAGCTCTCCGCTTTGCCCCACGGGGTTCTCTAACAGAACCAGCTTCC
TAGCCTCGTAGAGACCAAAGGCCGCCCGCCTGCTGGGGTTTCTCCAGCACCCAGCTTGCTGGCTGCCCTCT
TTGCCCTTCTGGCCTCCAGCTGGGTGTGGGGGGCGGAGCAAGGCGGGGGACAGACGACGACCTTCTTAGCGATC
TAGGCCTGGCAAGAGCTCTGGCCCCAAGGCCCTCTTCCCAGGGGCTGCCAAGTCTGGCCCTGGCCCTGGCAT
ATCACCCCGCACTGTGGGGCCAGGCACCACTAGCCTGGCTCAAATATTCCCCAGGGAGACTGCTGTGTGCTGCC
GCCTGCTGCTGGCTCTCCCCAGCCCCACATCCCCTCTGGAAGAGAATGTAAATAAACCTGGACACAAGGGCC
TTCGTGGCCTCGA

WO 2004/030615

PCT/US2003/028547

2711/6881
FIGURE 2492

MQGPPRSLRAGLSLDDFIPGHLQSHIGSSSRGTRVPVIRNGGSNTLNFQFHDPAPRTVCNGGYTPRRDASQHPDP
AWYQTWPGPGSKPSASTKIPASQHTQNWSATWTKDSKRRDKRWVKYEGIGPVDESGMPIAPRSSVDRPRDWYRRM
FQQIHRKMPDLQLDWTFEPPRDPRHLGAQQRPAHRPGPATSSSGRSWDHSEELPRSTFNRYRGAFTVLQPSNQ
VLRRREKVDNVWTEESWNQFLQLELTGQRPKKPLVDDPGKEKPSQPIEVLLERELAELSAELDKDLRAIETRLPSP
KSSPAPRRAPRPPAGPASAWSSSYPHAPYLGSARSLSPHKMADGGSPFLGRRDFVYPSSTRDPSASNGGGSPA
RREEKKRKAARLKFDFAQSPKELTLQKGDIVYIHKEVDKNWLEGEHHGRLGIFPANYVEVLPAD EIPKPIKPPT
YQVLEYGEAVAQYTFKGDLEVELSFRKGEHICLIRKVNENWYEGRITGTGRQGIFPASYVQVSREPRRLCDDGP
QLPTSPRLTAAARSARHPSSPSALRSPADPTDLGGQTSRRTGFSFPTQEPRPQTQNLGTPGPALSHSRGFSHPL
DLGTSSPNTSQIHWTPYRAMYQYRPQNEDELELEREGDRVDVMQQCDDGWFVGVSRRTQKFGTFPGNYVAPV

WO 2004/030615

PCT/US2003/028547

2712/6881
FIGURE 2493

ACTTCCGCCCCGGCGGGAGACCGAAGGCTGGCGGCTGGTCGCGTTGCAGGCAACATGTCGGAAGGAAACGCCGCC
GGCGAGCCCAGCACGCCGGGAGGGCCCCGACCTCTCCTGACTGGGGCCCCGGGGGCTCATCGGGCGGCGGCCGGCG
CCTCCCCCTACCCCCGGCCGCTTCCCTCCATCCGTTCCAGGGACCTCACCCCTCGGGGGAGTCAAGAAGAAAACC
TTCACCCCAAATATCATCAGTCGGAAGATCAAGGAAGAGCCCAAGGAAGAAGTAACTGTCAAGAAGGAGAAGCGT
GAAAGGGACAGAGACCGACAACGAGAGGGGCATGGACGAGGGCGAGGCCGTCCAGAAGTGATCCAGTCTCACTCC
ATCTTTGAGCAGGGCCCAGCTGAAATGATGAAGAAAAAGGGAACTGGGATAAGACAGTGGATGTGTGTCAGACATG
GGACCTTCTCATATCATCAACATCAAAAAAGAGAAGAGAGAGACAGACGAAGAACTAAACAGATCTTGCGTATG
CTGGAGAAGGACGATTTCCCTCGATGACCCCGGCTTGAGGAACGACACTCGAAATATGCCTGTGTCAGCTGCCGCTG
GCTCACTCAGGATGGCTTTTTAAGGAAGAAAATGACGAACCAGATGTTAAACCTTGGCTGGCTGGCCCCAAGGAA
GAGGACATGGAGGTGGACATACCTGCTGTGAAAGTGAAAGAGGAGCCACGAGATGAGGAGGAAGAGGCCAAGATG
AAGGCTCCTCCCAAAGCAGCCAGGAAGACTCCAGGCCCTCCCGAAGGATGTATCTGTGGCAGAGCTGCTGAGGGAG
CTGAGCCTCACCAAGGAAGAGGAACCTGCTGTTTCTGTCAGCTGCCAGACACCCCTCCCTGGCCAGCCACCCACCCAG
GACATCAAGCCTATCAAGACAGAGGTGCAGGGCGAGGACGGACAGGTGGTGCTCATCAAGCAGGAGAAAGACCGA
GAAGCCAAATTGGCAGAGAAATGCTTGTACCCCTGGCTGACCTGACAGAGGGTCAGGTTGGCAAGCTACTCATCCGC
AAGTCTGGAAGGGTGCAACTCCTCTTGGGCAAGGTGACTCTGGACGTGACCATGGGAACTGCCTGCTCCTTCTCTG
CAGGAGCTGGTGTCCGTGGGCCCTTGGAGACAGTAGGACAGGGGAGATGACAGTCTGGGACACGTGAAGCACAAA
CTTGATGTTCCCTGATTTTGAATCCCTCTTGGATCACAAACACCGGTAAAAATGAGCAGGTGGAGGAGGACGGC
GCCTGTGCCCACGGCTGCTGCCTGCTCCAGACATTTTGTCTTGAATCTGTGAGACCCAGAAGGGGCCCCACTGAG
CCCACTCACTCCAGCCTTTGGCAACCATTGTTCCAGGTCCCCCAGGGCTTCCCTCCACAGCAGCTGTGAATGGCA
CAGTGACCTTCTGTCAGCGTGAGATGGCACATCCTTGCTGCTGGGGACTTGGCCCTGCTATTTATTTTGTATT
TATGTCTTAATCTCTTCCACTGATGCATCCTCCAAGGGTAGATGGGGAGGGTCTGTGTGAAGGGGCCGGCTTCTC
TTGGTGCTGCTGGGTTGCAGGGGCAGGAAGCGTGTGGACTGCAGCTTCTGCTGGTGCTCCCCCGTCTCTCTTG
AGGCAGTATAGGAGAGAGAGCAAGGATTGAGTCTGAGACTTAAGCACTCGGTCCCAGCTTGCCAGTTCTCTGGTTC
TGTGTCCTTGGACAACTACCTAACCTTTCTGAGCCTCCTATACCTCATCCGACACAAATGGGGATGATACCTAC
CTCCAGGGTTGGCGTGAGGATTATGGGCTATTATAGATGAAAACCTGCACAAGGCCAGAACCAGCAGGCACTCAA
TAAACGTTTCATGTCCTTTTTCTCT

WO 2004/030615

PCT/US2003/028547

2713/6881
FIGURE 2494

MSEGNAAGEPSTPGGPRPLLTGARGLIGRRPAPPLTPGRLPSIRSRDLTLGGVKKKTFTPNII SRKIKEEPKEEV
TVKKEKRERDRDRQREGHGRGRGRPEVIQSHSIFEQGPAEMMKKGNWDKTVDVSDMGPSHIINIKKEKRETDEE
TKQILRMLEKDDFLDDPGLRNDTRNMPVQLPLAHSGWLFKEENDEPDVKPWLAGEPKEEDMEVDIPAVKVKEEPRD
EEEEAKMKAPPKAARKTPGLPKDVSAELLRELSLTKEEELFLQLPDTLPGQPPTQDIKPIKTEVQGEDGQVVL
IKQEKDREAKLAENACTLADLTEGQVGKLLIRKSGRVQLLLGKVTLDTMGTACSFQELVSVGLGDSRTGEMTV
LGHVKHKLVCSPDFESLLDHKHR

WO 2004/030615

PCT/US2003/028547

2714/6881
FIGURE 2495

GCCGCTTCCCTCGCCGCCGCCCGCCAGCATGCCCGGCGTGGCCCGCCTGCCGCTGCTGCTCGGGCTGCTGCTGC
TCCCGCGTCCCGGCCCGGCCGCTGGACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCC
TCAACTACAAAGACCCCTGCAAGGCGGCTGCCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCT
TCCAGGTACAGCAGGCTGTGGATCTCAGACGGCACACAGCTCGTAAGTCTCCATCAAAGCTGCAGTTCCAGGAA
ACACTTCTACCCCCAGCTGCCAGAGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGAT
CCCGTAGCCGGCGGGCGGGCGACGTCCCGACCAGAGCGTGTGTGGCCCGATGGGGTCATCCCCCTTTGTCAATTGGGG
GAAACTTCACTGGTAGCCAGAGGGCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTGTACCT
TCCTGGAGCGCACTGACGAGGACAGCTATATTGTGTTACCTATCGACCTTGCGGGTGCTGCTCCTACGTGGGTC
GCCGCGGGCGGGGGCCCCCAGGCCATCTCCATCGGCAAGAACTGTGACAAGTTGCGGCATTGTGGTCCACGAGCTGG
GCCACGTGCTCGGCTTCTGGCACGAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTCGTGAGAACA
TCCAGCCAGGGCAGGAGTATAACTTCCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACT
TCGACAGCATCATGATTACGCTCGGAACACATTCTCCAGGGGCATCTTCTGGGATACCATTTGTCCCCAAGTATG
AGGTGAACGGGGTGAAACCTCCCATTTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCCCGCAAGC
TTTACAAGTGCCAGCCTGTGGAGAGACCCTGCAAGACAGCACAGGCAACTTCTCCTCCCCCTGAATACCCCAATG
GCTACTCTGCTCACATGCACTGCGTGTGGCGCATCTCTGTACACCCCGGGGAGAAGATCATCTGAACTTACGT
CCCTGGACCTGTACCGCAGCCGCTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGC
CCCICCGAGGCCGCTTCTGCGGGTCCAACTCCCTGAGCCTATCGTCTCCACTGACAGCCGCTCTGGGTTGAAT
TCCGCAGCAGCAGCAATTGGGTTGGAAAGGGCTTCTTTGAGTCTACGAAGCCATCTGCGGGGGTGATGTGAAAA
AGGACTATGGCCACATTCAATCGCCCAACTACCCAGACGATTACCGGCCAGCAAAGTCTGCATCTGGCGGATCC
AGGTGTCTGAGGGCTTCCACGTGGGCCTCACATTCCAGTCTTTGAGATTGAGCGCCACGACAGCTGTGCCTACG
ACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCTCATCGGGCGCTACTGTGGCTATGAGAAGCCTG
ATGACATCAAGAGCACGTCCAGCCGCTCTGGCTCAAGTTCGTCTCTGACGGGTCCATTAACAAAGCGGGCTTTG
CCGTCAACTTTTTTCAAAGAGGTGGACGAGTGCTCTCGGCCAACCGCGGGGGCTGTGAGCAGCGGTGCCTCAACA
CCCTGGGCAGCTACAAGTGCAGCTGTGACCCCGGTACGAGCTGGCCCCAGACAAGCGCCGCTGTGAGGCTGCTT
GTGGCGGATTCCCTACCAAGCTCAACGGCTCCATCACCAGCCCCGGGCTGGCCCCAAGGAGTACCCCCCAACAAGA
ACTGCATCTGGCAGCTGGTGGCCCCACCCAGTACCGCATCTCCCTGCAGTTTGACTTCTTTGAGACAGAGGGCA
ATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGACTCACAGCTGACTCCAAGCTGCATGGCAAGTTCT
GTGGTTCTGAGAAGCCCCGAGGTATCACCTCCAGTACAACAACATGCGCGTGGAGTTCAAGTCCGACAACACCG
TGTCCAAAAAGGGCTTCAAGGCCCACTTCTTCTCAGAAAAGAGGCCAGCTCTGCAGCCCCCTCGGGGACGCCCC
ACCAGCTCAAATTCGAGTGCAGAAAAGAAACCGGACCCCCCAGTGAGGCCTGCCAGGCCTCCCGGACCCCTTGT
TACTCAGGAACCTCACCTTGGACGAATGGGATGGGGCTTCGGTGCCCAACACCCCCACCTCCACTCTGCCA
TTCCGGCCCCACCTCCCTCTGGCCGGACAGAAGTGGTCTCTTCTCCCCACTGTGCCGTCGCGGACCGGGGA
CCCTTCCCCGTGCCCTACCCCTCCCATTTTGATGGTGTCTGTGACATTTCTGTTGTGAAGTAAAGAGGGACC
CCTGCGTCTGC

WO 2004/030615

PCT/US2003/028547

2715/6881
FIGURE 2496

MPGVARLPLLLGLLLLPRPGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRAFQVQQAVDLR
RHTARKSSIKA AVPGNTSTPSCQSTNGQPQRGACGRWRGRSRSRRAATSRPERVWPDGVIPFVIGGNFTGSQRAV
FRQAMRHWEKHTCVTFLERTDEDSYIVFTYRPGCCSYVGRRGGGPQAISIGKNCDKFGIVVHELGHVVGFWHEH
TRPDRDRHVSIVRENIQPGQEYNFLKMEPQEVESLGETYDFDSIMHYARNTFSRGIFLDTIVPKYEVNGVKPPIG
QRTLSKGDIAQARKLYKCPACGETLQDSTGNFSSPEYPNGYSAHMCVWRISVTPGEKIILNFTSLDLYRSRLC
WYDYVEVRDGFWRKAPLRGRFCGSKLPEPIVSTD SRLWVEFRSSSNWVGKGF FAVYE AICGGDVKKDYGHIQSPN
YPDDYRPSKVCIWRIQVSEGFHVGLTFQSFEIERHDS CAYDYLEVRDGHSESSTLIGRYCGYEKPDDIKSTSSRL
WLKFVSDGSINKAGFAVNFFKEVDECSRPNRGGCEQRCLNTLGSYKCS CDPGYELAPDKRRCEAACGGFLTKLNG
SITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFDF FETEGNDVCKYDFVEVRSGLTADSKLHGKFCGSEKPEVIT
SQYNMRVEFKSDNTVSKKGFKAHFFSEKRPALQPPRGRPHQLKFRVQKRNRT PQ

WO 2004/030615

PCT/US2003/028547

2716/6881
FIGURE 2497

GCCGCTTCCCTCGCCGCCGCCGCCGCCAGCATGCCCGCGTGGCCCCGCTGCCGCTGCTGCTCGGGCTGCTGCTGC
TCCCGCGTCCCGGCCGCCGCCGCTGGACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCC
TCAACTACAAAGACCCCTGCAAGGCGGCTGCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCCT
TCCAGGTACAGCAGGCTGTGGATCTCAGACGGCACACAGCTCGTAAGTCTCCATCAAAGCTGCAGTTCCAGGAA
ACACTTCTACCCCCAGCTGCCAGAGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGAT
CCCGTAGCCGGCGGGCGGGCGACGTCCCGACCAGAGCGTGTGTGGCCCGATGGGGTCATCCCCCTTTGTCAATTGGGG
GAAACTTCACTGGTAGCCAGAGGGCAGTCTTCCGGCAGGCCATGAGGCACCTGGGAGAAAGCACACCTGTGTACCT
TCCTGGAGCGCACTGACGAGGACAGCTATATTGTGTTACCTATCGACCTTGGCGGGTGTGCTCCTACGTGGGGTC
GCCGCGGGCGGGGGCCCCCAGGCCATCTCCATCGGCAAGAACTGTGACAAGTTCCGCATTGTGGTCCACGAGCTGG
GCCACGTGCTCGGCTTCTGGCACGAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTCTGTGAGAACA
TCCAGCCAGGGCAGGAGTATAACTTCCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACT
TCGACAGCATCATGCATTACGCTCGGAACACATTCTCCAGGGGCATCTTCTGGATACCAATTGTCCCCAAGTATG
AGGTGAACGGGGTGAACCTCCCATTTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCCCGCAAGC
TTTACAAGTGCCAGCCTGTGGAGAGACCTGCAAGACAGCACAGGCAACTTCTCCTCCCCCTGAATACCCCAATG
GCTACTCTGCTCACATGCACTGCGTGTGGCGCATCTCTGTACACCCCGGGGAGAAGATCATCTGAACTTCACGT
CCCTGGACCTGTACCGCAGCCGCTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGC
CCCTCCGAGGCCGCTTCTGCGGGTCCAACTCCCTGAGCCTATCGTCTCCACTGACAGCCGCTCTGGGTGAAT
TCCGCAGCAGCAGCAATTGGGTGGAAAGGGCTTCTTTGCACTCTACGAAGCCATCTGCGGGGGTGATGTGAAAA
AGGACTATGGCCACATTCAATCGCCCAACTACCCAGACGATTACCGGGCCAGCAAAGTCTGCATCTGGCGGATCC
AGGTGTCTGAGGGCTTCCAGTGGGCCCTCACATTCCAGTCCCTTTGAGATTGAGCGCCACGACAGCTGTGCCTACG
ACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCCCTCATCGGGCGCTACTGTGGCTATGAGAAGCCTG
ATGACATCAAGAGCACGTCCAGCCGCTCTGGCTCAAGTTCGTCTCTGACGGGTCCATTAACAAAGCGGGCTTTG
CCGTCAACTTTTTCAAAGAGGTGGACGAGTGCTCTCGGCCAACCGCGGGGGCTGTGAGCAGCGGTGCCTCAACA
CCCTGGGCAGCTACAAGTGCAGCTGTGACCCCGGTACGAGCTGGCCCCAGACAAGCGCCGCTGTGAGGCTGCTT
GTGGCGGATTCCCTACCAAGCTCAACGGCTCCATCACCAGCCCGGGCTGGCCCCAAGGAGTACCCCCCAACAAGA
ACTGCATCTGGCAGCTGGTGGCCCCACCCAGTACCGCATCTCCCTGCAGTTTGACTTCTTTGAGACAGAGGGCA
ATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGACTCACAGCTGACTCCAAGCTGCATGGCAAGTTCT
GTGGTTCTGAGAAGCCCCGAGGTCACTACCTCCAGTACAACAACATGCGCGTGGAGTTCAAGTCCGACAACACCG
TGTCAAAAAAGGGCTTCAAGGCCACTTCTCTCAGTCTTGGAGGGGGCAGGGGACCGACACTCACATCTATCAG
GCCTGGAGTTACTGCTCTGCCCCCATGCCCTGGTCGACACTGTGCCCCCCCCACCCTCAGCCCTGCACGGAGACA
CACACGCCCACACGCACACACATGTGCACACACATTGCCCCATCGCACAAAGAAACCTGCAGAGGACCCCCACTGG
GGGCATCGAGGCTCAGCCCTCAGGGCCCGGGCATCTGACTCTGGCCCCCAGGAGGGGAGCTATTTGACTTTT
GGGACACCCACCGAGGAGACCCTAAGCCAAGAAGGAGAAGAAAGAGCCTGAAGACCTTCAGTCTGACCCCTGCCA
CCTTCCGGGGCATTGTGGGCACTGTAGGAAAAGAGGCCAGCTCTGCAGCCCCCTCGGGGACGCCCCACCAGCTCA
AATTCCGAGTGCAGAAAAGAAACCGGACCCCCAGTGAGGCCTGCCAGGCCTCCCGGACCCCTTGTTACTCAGGA
ACCTCACCTTGGACGGAATGGGATGGGGGCTTCCGTGCCCCACCAACCCCCACCTCCACTCTGCCATTCCGGCCC
ACCTCCCTCTGGCCGGACAGAACTGGTGCTCTCTTCTCCCCACTGTGCCCGTCCGCGGACCGGGGACCCCTTCCCC
GTGCCCTACCCCTCCCATTTTGATGGTGTCTGTGACATTTCTGTTGTGAAGTAAAAGAGGGACCCCTGCGTCC
TGC

WO 2004/030615

PCT/US2003/028547

2717/6881
FIGURE 2498

MPGVARLP LLLGLLLLPRGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRAFQVQQAVDLR
RHTARKSS IKA AVPGNTSTPSCQSTNGQPQRGACGRWRGRSRRAATSRPERVWPDGVIPFVIGGNFTGSQRAV
FRQAMRHWEKHTCVTFLERTDEDSYIVFTYRPGCCSYVGRRGGGPQAISIGKNCDKFGIVVHELGHVVGFWHEH
TRPDRDRHVSIVRENIQPGQEYNFLKMEPQEVESLGETYDFDSIMHYARNTFSRGIFLDITVPKYEVNGVKPPIG
QRTLSKGDIAQARKLYKCPACGETLQDSTGNFSSPEYPNGYSAHMCVWRISVTPGEKIILNFTSLDLYRSRLC
WYDYVEVRDGFWRKAPLRGRFCGSKLPEPIVSTD SRLWVEFRSSSNWVGKGF FAVYEAICGGDVKKDYGHIQSPN
YPDDYRPSKVCIWRIQVSEGFHVGLTFQSF EIERHDS CAYDYLEVRDGHSESSTLIGRYCGYEKPDDIKSTSSRL
WLKFVSDGSINKAGFAVNFFKEVDECSRPNRGGEQRCLNTLGSYKSCDPGYELAPDKRRCEAACGGFLTKLNG
SITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFDF FETEGNDVCKYDFEVRSGLTADSKLHGKFCGSEKPEVIT
SQYNNMRVEFKSDNTVSKKGFKAHFFSVLEGAGDRHSHLSGLELLLC PHALVDTVPAPP SALHGDTHAHTH THVH
THCP IAQETCRGPPLGASRLSPQGPGLTLAPQEGSYLDFWDTHRGDPKPRRRRKS LKTFSLTPATFRGIWAL

WO 2004/030615

PCT/US2003/028547

2718/6881
FIGURE 2499

GCCAGCATGCCCCGGCGTGGCCCCGCCTGCCGCTGCTGCTCGGGCTGCTGCTGCTCCCGCTCCCGGCCGGCCGCTG
GACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCCCTCAACTACAAAGACCCCTGCAAG
GCGGCTGCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCTTCCAGGTACAGCAGGCTGTGGAT
CTCAGACGGCACACAGCTCGTAAGTCCTCCATCAAAGCTGCAGTTCCAGGAAACACTTCTACCCCCAGCTGCCAG
AGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGATCCCGTAGCCGGCGGGCGGCGACG
TCCCCGACCAGAGCGTGTGTGGCCCCGATGGGGTCATCCCCTTTGTCATTGGGGGAAACTTCACTGGTAGCCAGAGG
GCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTGTACCTTCTTGGAGCGCACTGACGAGGAC
AGCTATATTGTGTTACCTATCGACCTTGCGGGTGCTGCTCCTACGTGGGTGCGCCGCGGGCGGGGGCCCCAGGCC
ATCTCCATCGGCAAGAAGTGTGACAAGTTCGGCATTGTGGTCCACGAGCTGGGCCACGTCGTCGGCTTCTGGCAC
GAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTCGTGAGAACATCCAGCCAGGGCAGGAGTATAAC
TTCCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACTTCGACAGCATCATGCATTACGCT
CGGAACACATTCTCCAGGGGCATCTTCTGGATACCATTTGTCCCCAAGTATGAGGTGAACGGGGTGAAACCTCCC
ATTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCGCAAGCTTTACAAGTGCCAGCCTGTGGA
GAGACCTTGCAAGACAGCACAGGCAACTTCTCCTCCCCCTGAATACCCCAATGGCTACTCTGCTCACATGCACTGC
GTGTGGCGCATCTCTGTACACCCGGGGAGAAGATCATCCTGAACCTTACGTCCCTGGACCTGTACCGCAGCCGC
CTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGCCCTCCGAGGCCGCTTCTGCGGG
TCCAAACTCCCTGAGCCTATCGTCTCCACTGACAGCCGCCTCTGGGTTGAATCCGCAGCAGCAGCAATTGGGTT
GGAAAGGGCTTCTTTGCAGTCTACGAAGCCATCTGCGGGGGTGATGTGAAAAGGACTATGGCCACATTCAATCG
CCCAACTACCCAGACGATTACCGGGCCAGCAAAGTCTGCATCTGGCGGATCCAGGTGTCTGAGGGCTTCCACGTG
GGCCTCACATTCCAGTCCCTTTGAGATTGAGCGCCACGACAGCTGTGCCTACGACTATCTGGAGGTGCGCGACGGG
CACAGTGAGAGCAGCACCCCTCATCGGGCGCTACTGTGGCTATGAGAAGCCTGATGACATCAAGAGCACGTCCAGC
CGCCTCTGGCTCAAGTTCGTCTCTGACGGGTCCATTAACAAAGCGGGCTTTGCCGTCAACTTTTCAAAGAGGTG
GACGAGTGCTCTCGGCCAACCAGCGGGGGCTGTGAGCAGCGGTGCCTCAACACCCTGGGCAGCTACAAGTGCAGC
TGTGACCCCGGTACGAGCTGGCCCCAGACAAGCGCCGCTGTGAGGGGTGTTATGATCTACAGGTTGGGAAACCC
CTGTTGTGGGACAGACACTGTTTCCGCCTCTCCACGCATGGTCCCGAGATGCTGGGGACAGCACTCCGAGGCTTAA

TGGCTCCAGCTCACTAGGCCGATCCTGCTGTGCCCCCGAGCTGCTCCCTTTCTGACCTCCCAGGACCGCCCT
CCCTGAAGTGCCTTCCCTGAGTCCCTTATTCCTGCTCACTCCCTCTTGGAGGACCTTGGCCTGTTTCAATTTGCAGA
GAAGATAGAAATGGCCACACTTATGACCCCTTAGCTCCCCACTCCTCCCTACAGGCCACCCCTGAGGACACCC
AGGCCACCCTGCTCCTCCCGTCCGCCCCAGAGGGACAGACAGGTCCCTGAGCCTTGGGGAGTCCACAGGCT
CCCCATCTTCTCCTTACTGCATCTCAGCCACATCTCAGCCCTTCCCCATGGCAGGGGCTCCCCGACAGCATGC
CACCTTCCCTTGTCCCCGACGTGCTTGTGGCGGATTCTCACCAAGCTCAACGGCTCCATCACCAGCCCGGGCTG
GCCAAGGAGTACCCCCCAACAAGAACTGCATCTGGCAGCTGGTGGCCCCCACCAGTACCGCATCTCCCTGCA
GTTTGACTTCTTTGAGACAGAGGGCAATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGAATCACAGC
TGACTCCAAGCTGCATGGCAAGTTCTGTGGTTCTGAGAAGCCCGAGGTTCATCACCTCCAGTACAACAACATGCG
CGTGGAGTTCAAGTCCGACAACACCGTGTCCAAAAGGGCTTCAAGGCCCACTTCTTCTCAGAAAAGAGGCCAGC
TCTGCAGCCCCCTCGGGGACGCCCCACCAGCTCAAATTCCGAGTGCAGAAAAGAAACCGGACCCCCAG

WO 2004/030615

PCT/US2003/028547

2719/6881
FIGURE 2500

MPGVARLP L L L L L L L L L L P R P G R P L D L A D Y T Y D L A E E D D S E P L N Y K D P C K A A A F L G D I A L D E E D L R A F Q V Q Q A V D L R
R H T A R K S S I K A A V P G N T S T P S C Q S T N G Q P Q R G A C G R W R G R S R S R R A A T S R P E R V W P D G V I P F V I G G N F T G S Q R A V
F R Q A M R H W E K H T C V T F L E R T D E D S Y I V F T Y R P C G C C S Y V G R R G G G P Q A I S I G K N C D K F G I V V H E L G H V V G F W H E H
T R P D R D R H V S I V R E N I Q P G Q E Y N F L K M E P Q E V E S L G E T Y D F D S I M H Y A R N T F S R G I F L D T I V P K Y E V N G V K P P I G
Q R T R L S K G D I A Q A R K L Y K C P A C G E T L Q D S T G N F S S P E Y P N G Y S A H M H C V W R I S V T P G E K I I L N F T S L D L Y R S R L C
W Y D Y V E V R D G F W R K A P L R G R F C G S K L P E P I V S T D S R L W V E F R S S N W V G K G F F A V Y E A I C G G D V K K D Y G H I Q S P N
Y P D D Y R P S K V C I W R I Q V S E G F H V G L T F Q S F E I E R H D S C A Y D Y L E V R D G H S E S T L I G R Y C G Y E K P D D I K S T S S R L
W L K F V S D G S I N K A G F A V N F F K E V D E C S R P N R G G C E Q R C L N T L G S Y K C S C D P G Y E L A P D K R R C E G C Y D L Q V G K P L L
W D R H C F R L S T H G P E M L G T A L R G

WO 2004/030615

PCT/US2003/028547

2720/6881
FIGURE 2501

GCCAGCATGCCCGGCGTGGCCCGCTGCCGCTGCTGCTCGGGCTGCTGCTGCTCCCGCGTCCCGGCCGGCCGCTG
GACTTGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCCTCAACTACAAAGACCCCTGCAAG
GCGGCTGCCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCTTCCAGGTACAGCAGGCTGTGGAT
CTCAGACGGCACACAGCTCGTAAGTCTCCATCAAAGCTGCAGTTCCAGGAAACACTTCTACCCCCAGCTGCCAG
AGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGATCCCGTAGCCGGCGGGCGGCGACG
TCCCGACCAGAGCGTGTGTGGCCCGATGGGGTCATCCCCTTTGTTCATTGGGGGAAACTTCACTGGTAGCCAGAGG
GCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTGTACCTTCCCTGGAGCGCACTGACGAGGAC
AGCTATATTGTGTTACCTATCGACCTTGGGGTGCTGCTCCTACGTGGGTGCGCGGGCGGGGGCCCCAGGCC
ATCTCCATCGGCAAGAACTGTGACAAGTTCGGCATTGTGGTCCACGAGCTGGGCCACGTCGTCGGCTTCTGGCAC
GAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTTCGTGAGAACATCCAGCCAGGCGTTTCTCCACTCT
TCACTGCTCCTTCTCAGCTGTGGCTCTAGAAATGGTGCTTCCCTTCCCATGTTCCCTTGAGTCTCCACTCACCAG
GCCCTCTGCTGGACAGGACTCTTCTCAGACCTCCCCATTCCCCAGGCTCCCCCTTGGCTGCTCCCCGGACCTC
AGGGCAGGAGTATTAACTTCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACTTCGACAG
CATCATGCATTACGTCGGAACACATTCTCCAGGGGCATCTTCTGGATAACATTGTCCCCAAGTATGAGGTGAA
CGGGGTGAAACCTCCATTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCCGCAAGCTTTACAA
GTGCCCAGCCTGTGGAGAGACCTGCAAGACAGCACAGGCAACTTCTCCTCCCCTGAATACCCCAATGGCTACTC
TGCTCACATGCACTGCGTGTGGCGCATCTCTGTACACCCGGGGAGAAGATCATCCTGAACTTCACGTCCCTGGA
CCTGTACCGCAGCCGCTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGCCCCCTCCG
AGGGCCCAACACTGGCCAGGGATGACAACCTGGTATGGGAGCCAGGAGTCCCTGGCATCATTAGTCCCAGATAGCT
GCATTACTCACTTGCTGCGGAGACTTCAGGCCGCTTCTGCGGGTCCAACTCCCTGAGCCTATCGTCTCCACTGAC
AGCCGCTCTGGGTTGAATTCCGCGAGCAGCAGCAATTGGGTTGGAAAGGGCTTCTTTGCAGTCTACGAAGCCATC
TGCGGGGGTGATGTGAAAAAGGACTATGGCCACATTCAATCGCCCAACTACCCAGACGATTACCGGCCAGCAAA
GTCTGCATCTGGCGGATCCAGGTGTCTGAGGGCTTCCACGTGGGCCTCACATTCCAGTCCCTTGAGATTGAGCGC
CACGACAGCTGTGCTACGACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCCCTCATCGGGCGCTAC
TGTGGCTATGAGAAGCCTGATGACATCAAGAGCACGTCCAGCCGCCTCTGGCTCAAGTTCGTCTCTGACGGGTCC
ATTAACAAAGCGGGCTTTGCCGTCAACTTTTTCAAAGAGGTGGACGAGTGCTCTCGGCCCAACCGCGGGGGCTGT
GAGCAGCGGTGCTCAACACCCTGGGCAGCTACAAGTGCAGCTGTGACCCCGGGTACGAGCTGGCCCCAGACAAG
CGCCGCTGTGAGGCTGCTTGTGGCGGATTCTCACCAAGCTCAACGGCTCCATCACCAGCCCGGGCTGGCCCAAG
GAGTACCCCCCAACAAGAACTGCATCTGGCAGCTGGTGGCCCCACCCAGTACCGCATCTCCCTGCAGTTTGAC
TTCTTTGAGACAGAGGGCAATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGACTCACAGCTGACTCC
AAGCTGCATGGCAAGTTCTGTGGTTCTGAGAAGCCCGAGGTATCACCTCCCAGTACAACAACATGCGCGTGGAG
TTCAAGTCCGACAACCCGTGTCCAAAAGGGCTTCAAGGCCACTTCTTCTCAGAAAAGAGGCCAGCTCTGCAG
CCCCCTCGGGGACGCCCCACCAGCTCAAATTCCGAGTGCAGAAAAGAAACCGGACCCCCAG

WO 2004/030615

PCT/US2003/028547

2721/6881
FIGURE 2502

MPGVARLPLLLGLLLLPRPGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRAFQVQQAVDLR
RHTARKSSIKAAPGNTSTPSCQSTNGQPQRGACGRWRGRSRSRRAATSRPERVWPDGVIPFVIGGNFTGSQRAV
FRQAMRHWEKHTCVTFLERTDEDSYIVFTYRPGCCSYVGRRGGGPQAISIGKNCDKFGIVVHELGHVVGFWHEH
TRPD RDRHVSIVRENIQPGVLHSSLLLLSCGSRNGASFPCSLESSTHQALCWTGLFLRPSFFPRLP LAAPRTLRA
GV

WO 2004/030615

PCT/US2003/028547

2722/6881
FIGURE 2503

GCAAGCCGGAGCCCTGGGGTTGGGCAGCACTCGGTTCCGTGCAACTTTCAAGTGAGTTGCGAACTCCGCCCTGTA
GGCCGGTGCTGGTGGCCCGGCGCGCTGGAACCGCGGCGACCCGCTCCAGCGCGGGACCAGCAGCAAGGGCCGAGC
GCCAGGTTCTCCGCGGCAGAAAGGGCGGGTGGGAGCTGTAACTGCCCCGGCCGCGGGGCGCGCCCGCTCCCAAGT
CGGCTTCTCCCGCCGGGGCCGCTTTGCCCTCGGGTCTCCCCATTCTCCAGGTCCCCTGAACTGCACAGTCGGAG
GCCGTGGGCGGCGGGCTCTGCCCTCCGCCGAGGGACAGCCGGATCGCCCCCTCTGCTTCCCGCAACTGCCCTGATCA
CCCCCGTCCCAGCCCTTGAGTGAACGTCCTTCTGAGCGGCTTCTCGGGTCCCTCCCCACGTCCCAAAGGCCGGC
AAGATGGTGTCTGGATGATCTGTGCGCTGGTGGTGTGTTTGGGATGCTGTGTGCCAGCTTATGCTTCCTAT
AAGGCTGTGAAGACCAAGAACATTTCGTGAATATGTGCGGTGGATGATGTACTGGATTGTTTTTGCACCTCTTCATG
GCAGCAGAGATCGTTACAGACATTTTTATCTCTGTTTCCCTTTCTACTATGAGATCAAGATGGCCTTCGTGCTG
TGGCTGCTCTCACCTACACCAAGGGCGCCAGCCTGCTTTACCGCAAGTTTGTCCACCCGTCCCTGTCCCGCCAT
GAGAAGGAGATCGACGCGTACATCGTGCAGGCCAAGGAGCGCAGCTACGAGACCGTGCTCAGCTTCGGGAAGCGG
GGCCTCAACATTGCCGCTCCGCTGCTGTGCAGGCTGCCACCAAGAGTCAGGGGGCGCTGGCCGGCAGGCTGCGG
AGCTTCTCCATGCAGGACCTGCGCTCCATCTCTGACGCACCTGCCCCCTGCCTACCATGACCCCTCTACCTGGAG
GACCAGGTGTCCCACCGGAGGCCACCCATTGGGTACCGGGCCGGGGGCCTGCAGGACAGCGACACCGAGGATGAG
TGTGGTGCAGATACTGAGGCAGTCCCCCGGGCGCCAGCCCGGCCCGAGAGAAGCCCCCTAATCCGCAGCCAGAGC
CTGCGTGTGGTCAAGAGGAAGCCACCGGTGCGGGAGGGCACCTCGCGCTCCCTGAAGGTTTCGGACGAGGAAAAAG
ACTGTGCCCTCAGACGTGGACAGCTAGGGTCTGCTGCATCTGCCCCCTTCTTACCTCGTGCCCTGCAGGGCTCCA
GGGCTATTTGGAGGGACCTTGGGCTGCACATCTGGCCTGCCTGCACCAGCTGCCTGGGCCCCACCCTCCTGACTC
CTGCTGATGGTTAAGGGCCGGGAGCAGATGCTGCCAAGGCCACATGCAGGGATGCACCCACAATGTACCAAAGCA
GGCTGGGCCCAGGGTTCTATTTATTGCCTTGCTCTGCCCTCTCCCTTCCCCGGTTGTGGGACAAGAGCCCTCCCT
GAACCCCTGCAACCTCCCTGAACCCCTGCAAATGAAACCAAACGTCCACCTGGGTGTGTTTATTCTTCCTGTC
CTTCAAAGTACTTGATAGCCTTTTATAAGGCCTGGCACATGTGTCCTGGTTGTGTGTGTGTGTGTGTGGTGAGTGA
GGTCAGGTTTGCAGAGTGTGTTTGATAAATAAATACATAAAGGGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

WO 2004/030615

PCT/US2003/028547

2723/6881
FIGURE 2504

MVSWMICRLVVLVFGMLCPAYASYKAVKTKNIREYVRWMMYWIVFALFMAAEIVTDIFISWFPPFYIEIKMAFVLW
LLSPYTKGASLLYRKFBVHPSLSRHEKEIDAYIVQAKERSYETVLSFGKRGLNIAASAQVQAATKSQGALAGRLRS
FSMQDLRSISDAPAPAYHDPLYLEDQVSHRRPPIGYRAGGLQSDTEDECWSDTEAVPRAPARPREKPLIRSQSL
RVVKKRPPVREGTSRSLKVRTRKKTVPDSDVS

WO 2004/030615

PCT/US2003/028547

2724/6881
FIGURE 2505

GA CTGCAATGTGCCGATCTTAGCTGCTGCCTGAGAGGATGTCTGGGGTGTCCGAGCCCCCTGAGTCGAGTAAAGTT
GGGCACGTTACGCCGGCCTGAAGGCCCTGCAGAGCCCATGGTGGTGGTACCAGTAGATGTGGAAAAGGAGGACGT
GCGTATCCTCAAGGTCTGCTTCTATAGCAACAGCTTCAATCCTGGGAAAACTTCAAACCTGGTCAAATGCACTGT
CCAGACGGAGATCCGGGAGATCATCACCTCCATCCTGCTGAGCGGGCGGATCGGGCCCAACATCCGGTTGGCTGA
GTGCTATGGGCTGAGGCTGAAGCACATGAAGTCCGATGAGATCCACTGGCTGCACCCACAGATGACGGTGGGTGA
GGTGCAGGACAAGTATGAGTGTCTGCACGTGGAAGCCGAGTGGAGGTATGACCTTCAAATCCGCTACTTGCCAGA
AGACTTCATGGAGAGCCTGAAGGAGGACAGGACCACGCTGCTCTATTTTACCAACAGCTCCGGAACGACTACAT
GCAGCGCTACGCCAGCAAGGTGAGCGAGGGCATGGCCCTGCAGCTGGGCTGCCTGGAGCTCAGGCGGTTCTTCAA
GGATATGCCCCACAATGCACTTGACAAGAAGTCCAACCTCGAGCTCCTAGAAAAGGAAGTGGGGCTGGACTTGTT
TTTCCCAAAGCAGATGCAGGAGAACTTAAAGCCCAAACAGTTCCGGAAGATGATCCAGCAGACCTTCCAGCAGTA
CGCCTCGCTCAGGGAGGAGGAGTGCCTCATGAAGTTCTTCAACACTCTCGCCGGCTTCGCCAACATCGACCAGGA
GACCTACCGCTGTGAACCTCATTCAAGGATGGAACATTACTGTGGACCTGGTCATTGGCCCTAAAGGGATCCGCCA
GCTGACTAGTCAGGACGCAAAGCCACCTGCCTGGCCGAGTTCAAGCAGATCAGGTCCATCAGGTGCCTCCCGCT
GGAGGAGGGCCAGGCAGTACTTCAGCTGGGCATTGAAGGTGCCCCCAGGCCTTGTCCATCAAAACCTCATCCCT
AGCAGAGGCTGAGAACATGGCTGACCTCATAGACGGCTACTGCCGGCTGCAGGGTGAGCACCAAGGCTCTCTCAT
CATCCATCCTAGGAAAGATGGTGAGAAGCGGAACAGCCTGCCCCAGATCCCCATGCTAAACCTGGAGGCCCGCG
GTCCACCTCTCAGAGAGCTGCAGCATAGAGTCAGACATCTACGCAGAGATTCCCGACGAAACCTGCGAAGGCC
CGGAGGTCCACAGTATGGCATTGCCGTGAAGATGTGGTCTGAAATCGTATTCTTGGGGAAGGCTTTTTTGGGGA
GGTCTATGAAGGTGTCTACACAAATCACAAAGGGGAGAAAATCAATGTAGCTGTCAAGACCTGCAAGAAAGACTG
CACTCTGGACAACAAGGAGAAGTTCATGAGCGAGGCGAGTGATCATGAAGAACCTCGACCACCCGCACATCGTGAA
GCTGATCGGCATCATTTGAAGAGGAGCCACCTGGATCATCATGGAATTGTATCCCTATGGGGAGCTGGGCCACTA
CCTGGAGCGGAACAAGAACTCCCTGAAGGTGCTCACCCCTCGTGCTGTACTCACTGCAGATATGCAAAGCCATGGC
CTACCTGGAGAGCATCAACTGCGTGCACAGGGACATTGCTGTCCGGAACATCCTGGTGGCCCTCCCCTGAGTGTGT
GAAGCTGGGGGACTTTGGTCTTTCCCGGTACATTGAGGACGAGGACTATTACAAAGCCTCTGTGACTCGTCTCCC
CATCAAATGGATGTCCCCAGAGTCCATTAACCTCCGACGCTTCACGACAGCCAGTGACGTCTGGATGTTCCCGCT
GTGCATGTGGGAGATCCTGAGCTTTGGGAAGCAGCCCTTCTTCTGGCTGGAGAACAAGGATGTATCGGGGTGCT
GGAGAAAGGAGACCGGCTGCCAAGCCTGATCTCTGTCCACCGGTCTTTATACCCTCATGACCCGCTGCTGGGA
CTACGACCCAGTGACCGGCCCGCTTCAACGAGCTGGTGTGCAGCCTCAGTGACGTTTATCAGATGGAGAAGGA
CATTGCCATGGAGCAAGAGAGGAATGCTCGCTACCGAACCCCCAAAATCTTGGAGCCACAGCCTTCCAGGAACC
CCCACCAAGCCCAGCCGACCTAAGTACAGACCCCCCTCCGCAAAACCAACCTCCTGGCTCCAAAGCTGCAGTTCCA
GGTTCTTGAGGGTCTGTGTGCCAGCTCTCCTACGCTCACCAGCCCTATGGAGTATCCATCTCCCGTTAACTCACT
GCACACCCACCTCTCCACCGGCACAATGTCTTCAAACGCCACAGCATGCGGGAGGAGGACTTCATCCAACCCAG
CAGCCGAGAAGAGGCCCAGCAGCTGTGGGAGGCTGAAAAGGTCAAAATGCGGCAAATCCTGGACAAACAGCAGAA
GCAGATGGTGGAGGACTACCAGTGGCTCAGGCAGGAGGAGAAGTCCCTGGACCCCATGGTTTATATGAATGATAA
GTCCCCATTGACGCCAGAGAAGGAGGTGCGCTACCTGGAGTTACAGGGCCCCACAGAAGCCCCGAGGCTGGG
CGCACAGTCCATCCAGCCCACAGCTAACCTGGACCGGACTGATGACCTGGTGTACCTCAATGTCATGGAGCTGGT
GCGGGCCGTGCTGGAGCTCAAGAATGAGCTCTGTGAGCTGCCCCCGAGGGCTACGTGGTGGTGGTGAAGAATGT
GGGGCTGACCTGCGGAAGCTCATCGGGAGCGTGGATGATCTCCTGCCTTCTTGCCGTCTCTTACGGACAGA
GATCGAGGGCACCCAGAAACTGCTCAACAAAGACCTGGCAGAGCTCATCAACAAGATGCGGCTGGCACAGCAGAA
CGCCGTGACCTCCCTAAGTGAGGAGTGCAAGAGGCAGATGCTGACGGCTTACACACCCCTGGCTGTGGACGCCAA
GAACCTGCTCGACGCTGTGGACCAGGCCAAGGTTCTGGCCAATCTGGCCACCCACCTGCAGAGTGACGGAGGGT
GGGGGCCACCTGCCTGCGTCTTCCGCCCTGCCTGCCATGTACCTCCCTGCCTTGCTGTTGGTCTGTGGGTCT
TCCAGGGGGAAGGCCAAGGGGAGTACCTTCCCTTGCCACTTTGCACGACGCCCTCTCCCCACCCCTACCCCTGG
CTGTACTGCTCAGGCTGCAGCTGGACAGAGGGGACTCTGGGCTATGGACACAGGGTGACGGTGACAAAGATGGCT
CAGAGGGGGACTGCTGCTGCCTGGCCACTGCTCCCTAAGCCAGCCT

WO 2004/030615

PCT/US2003/028547

2725/6881
FIGURE 2506

GAATTCCGCCGCTGACCGAGGCGTGCAAAGACTCCAGAATTGGAGGCATGATGAAGACTCTGCTGCTGTTTGTGG
GGCTGCTGCTGACCTGGGAGAGTGGGCAGGTCTTGGGGGACCAGACGGTCTCAGACAATGAGCTCCAGGAAATGT
CCAATCAGGGAAGTAAGTACGTCAATAAGGAAATTCAAATGCTGTCAACGGGGTGAACAGATAAAGACTCTCA
TAGAAAAAACAAACGAAGAGCGCAAGACACTGCTCAGCAACCTAGAAGAAGCCAAGAAGAAGAAAGAGGATGCCC
TAAATGAGACCAGGGAATCAGAGACAAAGCTGAAGGAGCTCCCAGGAGTGTGCAATGAGACCATGATGGCCCTCT
GGGAAGAGTGTAAAGCCCTGCCTGAAACAGACCTGCATGAAGTTCTACGCACGCGTCTGCAGAAGTGGCTCAGGCC
TGGTTGGCCGCCAGCTTGAGGAGTTCTTGAACCAGAGCTCGCCCTTCTACTTCTGGATGAATGGTGACCGCATCG
ACTCCCTGCTGGAGAACGACCGGCAGCAGACGCACATGCTGGATGTCATGCAGGACCACTTCAGCCGCGCGTCCA
GCATCATAGACGAGCTCTTCCAGGACAGGTTCTTACCCGGGAGCCCCAGGATACCTACCACTACCTGCCCTTCA
GCCTGCCCCACCGGAGGCCTCACTTCTTCTTCCCAAGTCCCGCATCGTCCGCAGCTTGATGCCCTTCTCTCCGT
ACGAGCCCCTGAACTTCCACGCCATGTTCCAGCCCTTCTTGAGATGATACACGAGGCTCAGCAGGCCATGGACA
TCCACTTCCACAGCCCGGCCTTCCAGCACCCGCCAACAGAATTCATACGAGAAGGCGACGATGACCGGACTGTGT
GCCGGGAGATCCGCCACAACCTCCACGGGCTGCCTGCGGATGAAGGACCAGTGTGACAAGTGCCGGGAGATCTTGT
CTGTGGACTGTTCCACCAACAACCCCTCCCAGGCTAAGCTGCGGGCGGAGCTCGACGAATCCCTCCAGGTCGCTG
AGAGGTTGACCAGGAAATACAACGAGCTGCTAAAGTCTTACCAGTGGAAGATGCTCAACACCTCCTCCTTGCTGG
AGCAGCTGAACGAGCAGTTTAACTGGGTGTCCCGGCTGGCAAACCTCACGCAAGGCGAAGACCAGTACTATCTGC
GGGTCACCACGGTGGCTTCCACACTTCTGACTCGGACGTTCTTCCGGTGTCAGTGGTGGTCTGTAAGCTCT
TTGACTCTGATCCCATCACTGTGACGGTCCCTGTAGAAGTCTCCAGGAAGAACCCTAAATTTATGGAGACCGTGG
CGGAGAAAGCGCTGCAGGAATACCGCAAAAAGCACCGGGAGGAGTGAGATGTGGATGTTGCTTTTGCACCTTACG
GGGCATCTTGAGTCCAGCTCCCCCAAGATGAGCTGCAGCCCCCAGAGAGAGCTCTGCACGTACCAAGTAAC
CAGGCCCCAGCCTCCAGGCCCCCAACTCCGCCCAGCCTCTCCCCGCTCTGGATCCTGCACTCTAACACTCGACTC
TGCTGCTCATGGGAAGAACAGAATTGCTCCTGCATGCAACTAATTCAATAAAACTGTCTTGTGAGCTGAAAAAAA
AAAAAAAAAAAAAAAAAAGGAATTC

WO 2004/030615

PCT/US2003/028547

2726/6881
FIGURE 2507

MMKTLLLFVGLLLTWESGQVLGDQTVSDNELQEMSNQGSKYVNKEIQNAVNGVKQIKTLIEKTNEERKTLLSNLE
EAKKKKEDALNETRESETKLKELPGVCNETMMALWEECKPCLKQTCMKFYARVCRSGSGLVGRQLEEF LNQSSPF
YFWMNGDRIDSLENDRQQTHMLDVMQDHF SRASSI IDELFQDRFFTREPQDTHYLPFSLPHRRPHFFFPKSRI
VRSLMPFSPYEPLNFHAMFQPFLEMIHEAQQAMD IHFHSPAFQHPPTEFIREGDDDRTVCREIRHNSTGCLRMKD
QCDKCREILSVCSTNNPSQAKLRRELD ESLQVAERLTRKYNELLSYQWKMLNTSSLLEQLNEQFNWVSRLANL
TQGEDQYYLRVTTVASHTSDSDVPSGVTEVVVKLFDSDPITVTVPEVSRKNPKF METVAEKALQEYRKKHREE

WO 2004/030615

PCT/US2003/028547

2727/6881
FIGURE 2508

ATAGTGACAAGTTTGGAGAAGGTCCAGCTATGGAGGAAGTTCATATGGGAATAGTACTAACAATGTCCCAGCAT
CTTCCTCTACAGCTACAGCTTCCACACAGACGCAGCATTTCGGGAATGTCCCCGTACCTAGCAACAGTTATGACA
CTTCCCCACAGCCTTGCACTACCAATCAAAATGGGAGGGAGAATAATGAGCGATTATCTACATCCAATGGAAAGA
TGTCACCAACTCGCTACCATGCAAACAGCATGGGTCAGAGGTCATACAGTTTTGAAGCCTCAGAAGAGGACCTAG
ATGTAGATGATAAAGTGGAAGAATTAATGAGGAGGGACAGCAGTGTGATAAAAGAGGAAATCAAAGCCTTTCTTG
CCAATCGGAGGATTTCCAAGCAGTTGTTGCACAGGTAACAGGTATCAGTCAGAGCCGGATCTCTCATTGGCTGT
TGCAGCAGGGATCAGACCTGAGTGAACAGAAGAAAAGAGCATTTTACCGATGGTATCAACTTGAGAAGACAAACC
CTGGCGCTACACTAAGTATGAGACCAGCCCCCATTTCCAATAGAGGACCCTGAATGGAGACAAACGCCTCCCCCAG
TCTCTGCCACATCTGGTACTTTCCGACTGCGACGAGGGAGTCGATTTACCTGGAGAAAGGAGTGCCTGGCTGTTA
TGGAAGTTACTTCAATGAGAATCAATACCCAGATGAAGCAAAGAGGGAAGAAATTGCAAACGCTTGCAATGCAG
TTATACAGAAGCCAGGCAAAAAGCTGTCAGATCTGGAAAGAGTTACCTCCCTGAAAGTATATAATTGGTTTGCTA
ACAGAAGGAAGGAGATCAAGAGGAGAGCCAATATTGAAGCAGCAATCCTGGAGAGTCATGGGATAGATGTGCAGA
GTCCAGGAGGCCACTCAAACAGTGATGATGTCGACGGGAATGACTACTCTGAGCAGGATGACAGTACGAGCCATA
GTGACCACCAAGACCCCCATCTCATTAGCTGTGGAAATGGCAGCAGTCAACCACACTATCTTGGCATTGGCCCGAC
AAGGAGCCAACGAAATCAAGACAGAGGCCCTGGATGATGACTGATCAGGGAGGTTAAACATGACAAGTTAACTTA
GTTTAGACGTAGCACCTTAGCAGACTTTCCCTCGGTCCCTTAACATGTGTTCTTACAGTATAACTTGCAGTTTCTTG
TATGTCAGGTAGCTGTTAGGGTCTTGTTCTGTGAAGATGGCATGGTGCCTCAGCCTTTGCATATACTCTCTCAG
TATTAACCTCCAGTAAATAATAACCAACCAACCAACCAACCAAACTTCCCTCTCCAGCCCCCGAGGCTAGAAAA
TCTTGCTGCTCCGTCTTAGCATTCCAAGAGAGTGCTTCCAGGTATTTAGATAGCCCTCAGTTCTCAAATATTAGA
CTACGTGTAAAATCTTGGGTACCTTTAGATTCTTGTAACACTAGTCTGTACTCCCTTTTCTTCCCCAAGACTGA
TAGGATGCAAGCTGAGGTGCTGGCACAGGAATGACAGACACCATTTGGGGAGTATCCACAGAGTCAAAGGAACAC
TAGAATCCCCACCTCAGCGTGAGGATAATTGATTTCCAGCTGCAATAAGCCGTGCCTCATTATAGCCACACTGTG
GCTAGATTATACTTCTTTGGGTGCTGTGCTAAGAATGTCAATGGAAAAAGCCGATCTCAGATTTTGTGTTGAAGTT
AACATGCCTGACACAGACATCCTTTCTCTCACAAGCTGTGTGACTTAGTAGATAAAATACTGCCTTCTGCCTTT
GGGACCATGATTAAAAACAAAGACAAAAACCAAAAGTCATTAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2728/6881
FIGURE 2509

MSPSPSNSYDTSPQPCTTNQNGRENNERLSTSNKGKMSPTRYHANSMSGQSYSFEASEEDLDVDDKVEELMRDSS
VIKEEIKAF LANRRISQAVVAQVTGISQSRISHWLLQQGSDLSEQKKRAF YRWYQLEKTNPGATLSMRPAPIPIE
DPEWRQTPPPVSATS GTFRLRRGSRFTWRKECLAVMESYFNENQYPDEAKREEIANACNAVIQKPGKKLSDLERV
TSLKVYNWFANRRKEIKRRANIEAAILESHGIDVQSPGGHSNSDDVDGNDYSEQDDSTSHSDHQDPISLAVEMAA
VNHTILALARQGANEIKTEALDDD

WO 2004/030615

PCT/US2003/028547

2729/6881
FIGURE 2510

AGGTGGCGGAGATTGCACCGGAAGACGCTTCCTGGGTTTGAGGAGTTCAGTGAAGTCTATTGAACCAACCAAAAAGT
CCATTATGAAACTGTATTGCCTGTGAGGGCACCAACCTTACCATGCAATGTGCTCAAATTCAAATCAACCACCA
TTATGTTGGACTGCGGACTGGACATGACTTCTACCCTCAATTTCCCTTCCCTTGCCACTTGTTCAAAGTCCCAGGC
TGTCCAATCTTCCCTGGCTGGTCCCTGAAGGATGGAATGCTTTCTTGGACAAGGAGCTAAAGGAGTGCTCGGGTC
ATGTATTTGTGGATTCTGTGCCGAATTCTGTTTACCAGAGACGGAGCTAATAGATCTGTCTACAGTAGATGTGA
TTCTCATCTCTAACTATCACTGTATGATGGCGCTGCCATACATCACCGAGCACACCGGCTTCACAGGCACAGTGT
ATGCCACGGAACCCACCGTCCAGATCGGCAGGCTTCTCATGGAAGAGCTGGTGAATTTCAATTGAAAGAGTGCCAA
AGGCTCAGTCTGCCTCCTTGTGGAAGAATAAGGACATTAGAGGCTGTACCTTCTCCTCTCAAGGATGCAGTGG
AAGTCTCAACCTGGAGAAGATGCTATACAATGCAAGAGGTGAACCTCTGCCCTTAGTAAAATCCAGCTGGTGGGAT
ATTCTCAGAAAATTGAGCTTTTTGGTGCGGTCCAGGTGACTCCTCTGAGCTCTGGCTATGCCCTTGGGAGCTCCA
ACTGGATCATCCAGTCTCATTACGAGAAAGTGTCTTATGTCTCTGGATCCTCCTTGCTTACCACACACCCCCAGC
CCATGGACCAAGCTTCTCTCAAAAACAGCGATGTTCTTGTCTGACAGGGCTTACCCAGATCCCCACTGCAAAAC
CAGATGGAATGGTGGGAGAGTTCTGCAGCAACCTAGCTCTGACAGTCCGGAATGGAGGAAACGTGTTGGTTCCCT
GCTACCCTTCTGGAGTGATCTATGACCTCCTGGAGTGCCTATATCAGTACATCGACTCAGCCGGGCTTTCCAGCG
CCCCCTCTACTTCTATCTCCCTGTGGCCAACAGTTCACTGGAGTTTTCCAGATCTTTGCTGAGTGGCTTTGTC
ACAACAAACAGAGTAAGGTGTATCTTCCAGAACCACCTTTTCTCATGCAGAGCTCATTAGACCAATAAGCTGA
AGCACTACCCAGCATCCACGGAGACTTCAGCAACGACTTTAGACAGCCCTGTGTGGTGTTACCCGGGCACCCCTT
CCCTCCGCTTCGGGGACGTGGTCCACTTCATGGAGCTCTGGGGAAATCTAGTCTCAATACCGTCATATTCACGG
AACCAGACTTCTCCTACCTGGAAGCCCTGGCTCCTTACCAGCCGCTGGCCATGAAATGCATCTACTGCCCATCG
ACACCCGGCTGAACTTCATCCAGGTGTCAAAGCTGCTTAAAGAAGTGACAGCCCTGCACGTGGTGTGCTCCTGAGC
AGTACACTCAGCCGCCCCCAGCCAGTCCCACAGGATGGACCTCATGATCGACTGCCAGCCCCCGCCATGTCTT
ATCGGCGGGCTGAGGTTCTCGCCCTGCCCTTCAAACGTCGGTACGAGAAGATCGAGATCATGCCAGAGCTCGCAG
ATTACTGGTGCCCATGGAGATCAAGCCTGGCATCTCCTTGGCAACTGTCTCGCCGTGCTGCACACCAAAGATA
ACAAGCACTTGCTTCAGCCCCCTCCTCGGCCCGCCCAGCCACGAGCGGGAAGAAGAGAAAGCGGGTGAGCGATG
ACGTACCAGACTGCAAAGTCCCTGAAGCCTTTGTTGAGCGGTTCCATCCCTGTGGAGCAGTTCGTGCAGACCCCTGG
AGAAGCATGGCTTCAGTGATATTAAGGTGGAGGACACAGCCAAGGGCCATATCGTCTGCTCCAGGAGGCTGAGA
CGCTCATCCAGATTGAAGAAGACTCGACCCATATCATCTGCGACAATGACGAGATGCTCAGAGTGCAGTGCAGG
ACCTTGTCTCAAATTTCTTACAGAAGTTCTGAGTGGGCCATCTGAGCTACTTCCCTGAAATCCTGCAGTCCCTCA
CTGGCTGCCCTCACAAGCCACCTGAGGAGTGGCATGAGAGGCCATTAAGTGTGTCTTTGTGGTGTCTCTGGCTT
AAGGAGTGAAGAGGTGGCTCTTGAGGGAAATGGTCTGGACTTATCCCAGCACTGTTTCAGGCAAGAAGCTTTCCC
TTTCAACTTCAGGCTCATTTTCTTCTCAACTCTGGCTCTCTCAAGGAGCTGGAGGGTGACAGAAGTGGGACAGGA
GAAGTTTTCCAAGAGGTTTCATGGGAGGCGGAGGTGACTGGCTGGCTGTCTTGATCAGTCCCAGGCCTCGGCCAG
GGGAGCCAGCCTTTGGTTTCGTTTACTTGCCTACAGTGCTGTACGCAATAAGATGATGATCCCAAAATATGGTAA
AGTGAACCCATCTGTCTGCATTTTCTACTCTGAGCCCATTTGTTAATAAACACTTATTTTATAT

WO 2004/030615

PCT/US2003/028547

2730/6881
FIGURE 2511

MKLYCLSGHPTLPCNVLFKFKSTTIMLDCGLDMTSTLNFLLPLPLVQSPRLSNLPGWSLKDGNFLDKELKECSGHV
FVDSVPEFCLPETELIDLSTVDVILISNYHCOMMALPYITEHTGFTGTVYATEPTVQIGRLLMEELVNFIERVPA
QSASLWKNKDIQRLLPSPKDAVEVSTWRRCYTMQEVNSALSQIQLVGYSQKIELFGAVQVTPLSGGYALGSSNW
IIQSHYEKVS YVSGSSLLTTHPQPMQASLKNVDLVLTGLTQIPTANPDGMVGEFCSNLALTVRNGGNVLVPCY
PSGVIYDLLECLYQYIDSAGLSSAPLYFISPVANSSLEFSQIFAEWLCHNKQSKVYLPEPPFPHAELIQTNKLKH
YPSIHGDFSNDFRQPCVVFTGHPSLRFQDVVHFMELWGKSSLNTVIFTEPDFSYLEALAPYQPLAMKCIYCPIDT
RLNFIQVSKLLKEVQPLHVVCPEQYTQPPPAQSHRMDLMIDCQPPAMSYRRAEVLALPFKRRYEKIEIMPELADS
LVPMEIKPGISLATVSAVLHTKDNKHLQPPPRPAQPTSGKKRKRVSDDVPDCKVLKPLLSGSIPVEQFVQTLEK
HGFSDIKVEDTAKGHIVLLQEATLIQIEEDSTHII CDNDEMLRVRLRDLVLKFLQKF

WO 2004/030615

PCT/US2003/028547

2731/6881
FIGURE 2512

CTGCACAGGGAGTTTGTCTTGTGCAAACAATTTCCAAGGCAGCGTTTTCTTCCCTGCCTGGGAGTGCAGGGCTCA
GCGCCTTCACTTTTGAAGTGAAGTCAAGAGACCTAAAGAAGCCCACCTGGCCAGCGGGAAGGGGGGCGCCGCCGCC
TCCCGGTTTTTGGGCAGCCCTGGCCAGCTCCCTGTGGCCTTGGAGGACTTCCACCGGGCAGGCGTTCCCATGATGC
CAGGCTACCAGGCGCGGGGATTCTGTCAGGCCGGCGCTGCTTTTTCTTAGAACCCCTTTCTAGAAAAGTACACC
TGGAGGTTTTTGTCTTCAAAGAGAGGAGAGGCAGCAGCATGGCGAGTGTCTGTCCCCGACGCTTGGAAAGCGGTCC
CTCCTGGGAGCCCGGTGTTGGGACCCAGTGCCTCGGAGGGGGCCCTCGGCTGCCCCACCCCTCGGAGCCACTGCTA
GAAGGGGCGCTCCCCAGCCTTTACACCTCTGATGACACCCCTGCCAGGAGCAGCCCAAGGAAGTCCCTTAAG
GCTCCCAGCACCTCGGGCCTTTCAGCAGGTGGCCTTTTCAGCCTGGGCAGAAAGTTTATGTGTGGTACGGGGGTCAA
GAGTGCACAGGACTGGTGGAGCAGCACAGCTGGATGGAGGGTCAGGTGACCGTCTGGCTGCTGGAGCAGAAGCTG
CAGGTCTGCTGCAGGGTGGAGGAGGTGTGGCTGGCAGAGCTGCAGGGCCCCGTGTCCCCAGGCACCCACCCCTGGAG
CCCGGAGCCCAGGCCCTGGCCTACAGGCCCGTCTCCAGGAACATCGATGTCCCAAAGAGGAAGTCGGACGCAGTG
GAAATGGATGAGATGATGGCGGCCATGGTGTGCTGACGTCCCTGTCTGTCAGCCCTGTTGTACAGAGTCCCTCCCGGG
ACCGAGGCCAACTTCTCTGCTTCCCGTGCAGCCCTGCGACCCATGGAAGGAGAGTGGTGACATCTCGGACAGCGGC
AGCAGCACTACCAGCGGTCACTGGAGTGGGAGCAGTGGTGTCTCCACCCCTCGCCCCCCCCACCCCAAGGCCAGC
CCCAAGTATTTGGGGGATGCTTTTTGGTTCTCCCCAACTGATCATGGCTTTGAGACCGATCCTGACCCCTTCTCTG
CTGGACGAACCAGCTCCACGAAAAAGAAAGAACTCTGTGAAGGTGATGTACAAGTGCCTGTGGCCAACTGTGGC
AAAGTTCTGCGCTCCATTGTGGGCATCAAACGACACGTCAAAGCCCTCCATCTGGGGGACACAGTGGACTCTGAT
CAGTTCAAGCGGGAGGAGGATTTCTACTACACAGAGGTGCAGCTGAAGGAGGAATCTGCTGCTGCTGCTGCTGCT
GCTGCCGCAGGCACCCAGTCCCTGGGACTCCACCTCCGAGCCAGCTCCCACCCCAAGCATGACTGGCCTGCCT
CTGTCTGCTCTTCCACACCTCTGCACAAAGCCCAGTCTTCCGGCCAGAACATCCTGGCCCGGAGTCTCCCTG
CCCTCAGGGGCTCTCAGCAAGTCAGCTCCTGGGTCCTTCTGGCACATTCAGGCAGATCATGCATACCAGGCTCTG
CCATCCTTCCAGATCCAGTCTCACCACACATCTACACCAGTGTGAGCTGGGCTGCTGCCCCCTCCGCCGCCTGC
TCTCTCTCTCCGGTCCGGAGCCGGTCGCTAAGCTTCAGCGAGCCCCAGCAGCCAGCACCTGCGATGAAATCTCAT
CTGATCGTCACTTCTCCACCCCGGGGCCAGAGTGGTGCCAGGAAAGCCCGAGGGGAGGCTAAGAAGTGCCGCAAG
GTGTATGGCATCGAGCACCGGGACCAGTGGTGCACGGCGTGCCGGTGGAAGAAGGCCTGCCAGCGCTTTCTGGAC
TGAGCTGTGCTGCAGGTTCTACTCTGTTCTGGCCCTGCCGGCAGCCACTGACAAGAGGCCAGTGTGTACACAGC
CCTCAGCAGAAACCGAAAGAGAAAGAACGGAACACGGAGTTTGGGCTCTGTTGGCTAAGGTGTAACACTTAAAG
CAATTTCTCCCATTTGTGCGAACATTTTATTTTTTAAAAAAA

WO 2004/030615

PCT/US2003/028547

2732/6881
FIGURE 2513

MASVLSRRLGKRSLLGARVLGPSASEGPSAAPPSEPLLEGAAPQPFTTSDDTPCQEQPKEVLKAPSTSGLQQVAF
QPGQKVYVWYGGQECTGLVEQHSWMEGQVTVWLLEQKLQVCCRVEEVWLAELQGPCPQAPPLEPGAQALAYRPVS
RNIDVPKRKSDAVEMDEMMAMVLTSLSCSPVVQSPPGTEANFSASRAACDPWKESGDISDSGSSTTSGHWSGSS
GVSTPSPPHPQASPKYLGDAGFGSPQTDHGFETDPPFLLDEPAPRKRNNSVKVMYKCLWPNCGKVLRSIVGIKRH
VKALHLGDTVDSQDFKREEDFYYTEVQLKEESAAAAAAAAAAGTPVPGTPTSEPAPTSPMTGLPLSALPPPLHKAQ
SSGPEHPGPESLPSGALSXSAPGSFWHIQADHAYQALPSFQIPVSPHIYTSVSWAAAPSAACSLSPVRSRSLSF
SEPQQPAPAMKSHLIVTSPPRAQSGARKARGEAKKCRKVYGIEHRDQWCTACRWKKACQRFLD

WO 2004/030615

PCT/US2003/028547

2733/6881
FIGURE 2514A

ATGCTCCATGCTGCAAGCTGCAAGGAGAGCCCAGGAGGGGTGTCTCTCTGGTGGAAAGTTGCGCTTGTGGAAGATG
ATTTATATAAAGAACGAACGAGAAAAAGAAGGAAATCAGATCGAGACCAGCGGTTCCGAGCAATTCCTCCATGG
AGCAGAGTGCTCTTAAGGAATATGAAAAATTGGAATCACGGACCAGAAGGGTTTTGAGCAACACTTATCAGAAAC
TTATTCACTGTCTTCTTCTGGATGACAGCATCCCTAATGGAGTCAAGTATCTCATAAATAGGCTTCTTGCTTGA
TTGAAAAGCCGACAGTGGACCCAATCTACATTGCATTATTTGGAAGCACTGGGGCTGGGAAGAGCTCCCTGATCA
ATGCCATCATCCAGCAAGCAATGTTTCTACCAGTGTCTGGAGAAAGCATATGTACTTCTGCAATTGTACAAGTGA
GCTCTGGCTGCTGTGTGTCAGTATGAGGCCAAAATCCACCTTCTGTCTGACCAGGAGTGGAGGGAGGAGCTGAAGA
ACCTGACCAAACCTCCTGCATAGGACGGAGGAGCTGAGCAGAGAAGAGGCAGATGCGTGGAAACAGGGATGAGGCAG
TGGAGGAAGCCACCTGGAAGCTACAAATGATTTATGGAATGGGGCAGAGAGTAAGAACTATGAGGAGTTACTGA
GGGCGAAGCCCAAAAGGAAGATCCCCACCTCCAGAGTCATCACCTCAAGGCGGAAGAGGCAGAAAGAGCTGTCCA
TCAAGCTGGACCCCTACATCCGCACACAGAGGAGAGATTGGGATGGAGAGGCCGCTGAGATGCGCATCTGGCCCT
TGATCAAACATGTGGAAGTGACACTTCCCAAATCCGACCTGATCCCAGAAGGGGTCGTGCTGGTGGACATCCCAG
GCACAGGCGACTTCAACAGCAAGAGGGACGAGATGTGGAAGAAAGACCATTGACAAAGTGTCTAGTGATCTGGGTGA
TCAGCGACATAGAGCGAGTTTCTGGGGGGCAAGCCCACGAAGACCTTCTGAATGAGAGCATCAAAGCCTGCCAGC
GGGGCTTCTGTAGGGACGTGGCCCTGGTGGTCACCAAGATGGACAACTCCACTTGCCAGAATACCTAAGGTCT
CAAAGTTTTAGAACTTCGGGAGAAGAGAAAACAGCAGCTGACTTCAAGGTTCTGGAAGCCTCAGATCTGGTGT
ATACAGTCAGCGCCAGGAGTACTGGCAGCAGGCTCTCCTCACCAGGAGGAAACGGAATCCCTAAGTTAAGAG
AATACATCAGGAAGAGCCTCTTGGACAAGAAGAAGAGGACAGTGACCAAGTATGTGACTGAAGCCTTTGGCCTGT
TGCTCCTCACAGATAGTTTCAACTCCACGCAAAACCTGCCGAATGAACACTTGACATGAGTGTCTGCGGAGAT
TTGCGGAAGAGAAGGTTGAGCTGCTGGAGAAGGCCATCGCACAGTGCTTCGCTGCAATGGAGCAGCCTCTGCAAG
AAGGGGTGAGGACCGCCAGGACTTCTTACCGCTGCATCCTCAGAGCATGCTTGGTGGAGAGTAAAGGAAACCAAG
GTTTTATCAGACCCCTGAAAGCTGTTTGCTGAAAAATGGCATCTATGCCTCCAGGACTCTGGCGAGAATTGATC
TAAATGAAGCCCTCACTCAGCCCGTCTATGACCAGATCGACCTGTTTTTGAAGCATTTTTAGGACGGGGAAGC
CCACTGGTTTCACTCTGATGCCTCACATAGATGCTTTTAAAGCAGTCCCTGCAGGAGATAAGTGCCATCCTCGGGGGCC
TAAGAAGTGGCTGGAATATGATAGCTGCAAAAAAATTTCTGATCCAGGAGATAAGTGCCATCCTCGGGGGCC
TGGAGGACCACATCCTCAGAAGGAAGAGGAGGATCTACGAGTCCCTCACTGCCTCTGTCCAGAGTGACCTGAAGC
TCTGTTACGAAGAGGAGCTCAGATCACGGGCAAAAAAGCGTGTGAGCGGATGAAAGATGCCATCAGAAGAGGAG
TGGACCGGAGGTGGCTGAGGGCATGTTTGAAGGGGCCAGGAAGGATGCAGACCAAGTTTCAGCAGGTAAGG
TACTCTATGCCCACATCCTGGATCCTAGACCCGAGAGGCTCCGGGGAGGAGGAAGAGGAGTGCAGAAGACTG
GAATCGTGGAGAAGGTGAAGGGCAGCATCAACCACTATGCTGGCCCTTGCTTCGTCCCAGGGGGATGGCCTCTACA
AGGAGCTTGCAGGGCTGAGCTGCAGGATGGGAGACAATGACAAATGGGACGTGGCCCCCTTCTCAGGAAGGGGAC
AGCTGTTGCAGGGTGTGATGGAGAACAAGCTATGTACCTACACACCGTCAGCGACTGTGACACCAGCTCCATCT
GTGAGGATTCTTTGATGGCAGGAGCCTGTCCAAGCTGAACCTGTGTGAGGATGGTCCATGTCAAAACGGCGGG
CAAGCATCTGCTGTACCCAGCTGGGGTCCCTGTGCGCCCTGAAGCATGCTGTCTGGGGCTCTACCTGCTGGTCT
TCCTGATTCTTGTGGGCATCTTCATCTTAGCAGCCTGCTGCCACGCGTGCAGTTCCCAGAGGACATGACCCAGG
GCTTGCCAGCCCGTGACAGCATTTTACCCCTTGATCTTGGGAGGTCCCTGACAGCAGAGGGTCTGGTACCTGG
GAACAGCCAGGGACAGAAGCTGGGACCCAGGAGCTGTGACAGAGGGGCTGAGTTGTCTGGGGAGAGCGCTTACC
TGCCCACTCCTGTCCCCGGGGATCGGGACTTCCAGAGGGTGAAGTGTCCAGGCCGCGCAGCTCCCCTGACGACC
TGAAGGCCCTGACTCGCAATGTGAACCGGCTGAATGAGAGCTTCCGGGACTTGACAGTGCAGGCTGCTGCAGGCTC
CGCTGCAAGCGGACCTGACGGAGCAGGTGTGGAAGGTGCAGGACGCGCTGCAGAACCAGTCAGACTCGTTGCTGG
CGCTGGCGGGCGCAGTGACAGCGGCTGGAGGGCGCGCTGTGGGGCTGCAGGCGCAGGCGGTGCAGACCAGCAGG
CGGTGGCCCTGCTGCGGGACCGCACGGGCCAGCAGAGCGACACGGCGCAGCTGGAGCTCTACCAGCTGCAGGTGG
AGAGCAACAGTAGCCAGCTGCTGCTGAGGCGCCACGCGGGCCTGCTGGACGGGCTGGCGCGCAGGGTGGGCATCC
TGGGCGAGGAGCTGGCCGACGTGGGCGGCGTGTGCGCGGCCTCAACCACAGCCTGTCTACGACGTGGCCCTCC
ACCGCACGCGGCTGCAGGACCTGCGGGTGTGGTGAGCAACGCCAGCGAGGACACGCGCCGCTGCGCCTGGCGC
ACGTAGGCATGGAGCTGCAGCTGAAGCAGGAGCTGGCCATGCTCAACGCGGTACCGAGGACCTGCGCCTCAAGG
ACTGGGAGCACTCCATCGCACTGCGGAACATCTCCTCGCGAAAGGGCCACCGGGACCCAAAGGTGATCAGGGGG
ATGAAGGAAGGAAGGCAGGCCTGGCATCCCTGGATTGCTGGACTTCGAGGTCTGCCCGGGGAGAGAGGTACCC

WO 2004/030615

PCT/US2003/028547

2734/6881
FIGURE 2514B

CAGGATTGCCCGGGCCCAAGGGCGATGATGGGAAGCTGGGGGCCACAGGACCAATGGGCATGCGTGGGTTCAAAG
GTGACCGAGGCCCAAAGGAGAGAAAGGAGAGAAAGGAGACAGAGCTGGGGATGCCAGTAAGGACATTCTGCTGG
GGCCGTGGGATATGATCATTACACGATTACTCTTGGCCATGCAGTACACATCAGACACTTCAACTGCCTTCTCTT
CAGTTGCTCATATCAGCTGA

WO 2004/030615

PCT/US2003/028547

2735/6881
FIGURE 2515

CTTCCTGCCGCCGCGTTCGCACCTCGCTGCTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCA
GAGAAAAAAAAAATTACTTATTTTCTTGCCCCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGA
GGGAAATCGTGCACATCCAGGCTGGTCAGCGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATG
AACATGGCATCGACCCCACTGGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCCGTGTACTACA
GTGAAGCCACTGATGGCAAATATGTTCCCTCGTGCCATACTGGTGGATCTAGAACCCCTTCCCACGTCTCCATTTC
TTTATGCCTGGCTTTGCCCTCTCACCAGCCATGGAAGCCAGCAGTATCGAGCTCTCACAGTGCCGGAACCTCACC
CAGCAGGTCTTCGATGCCAAGAGCATGATGGCTGCCTGTGACCCCGCCACGGCCGATACCTCACCGTGGCTGCT
GACTTCCGTGGTCGGATGTCCATGAAGGAGGTCGATGAGCAGATGTTTAACGTGCAGAACAAGAACAGCAGCTAC
TTTGTGGAATGGATCCCCAACAATATCAAGACAGCTGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTC
ACCTTCATCGGCAGTAGCACGGCCATCCAGGAGCTCTTCAAGCACATCTCGGAGCAGTTCACTGCCATGTTCCGC
CGGAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGA

WO 2004/030615

PCT/US2003/028547

2736/6881
FIGURE 2516

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSLQLDRISVYYNEATGGKYVPRAILVDLEPGSHVS
ISLCLALPLSPAVEASSIELSQCRNSPSRSSMPRT

WO 2004/030615

PCT/US2003/028547

2737/6881
FIGURE 2517

GCACCTCGCTGCTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCAGAGAAAAAAAAAATTACTT
ATTTTCTTGCCCCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGACATCC
AGGCTGGTCAGCGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCA
CTGGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCCGTGTACTACAGTGAAGCCACTGATGGCA
AATATGTTCCCTCGTGCCATACTGGTGGATCTAGAACCTGGGACCATGGACTCTGTTTCGCTCAGGTCCTTTTGGCC
AGATCTTTAGACCAGACAACCTTTGTATTTGGTCAGTCTGGGGCAGGTAACAACCTGGGCCAAAGGCCACTACACAG
AGGGCGCCGAGCTGGTTGATTCTGTCTGGATGTGGTACGGAAGGAGGCAGAGAGCTGTGACTGCCTGCAGGGCT
TCCAGCTCCCCGCCACGGCCGATACCTCACCCTGGCTGCTGACTTCCGTGGTCGGATGTCCATGAAGGAGGTGCA
TGAGCAGATGTTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATATCAAGACAGC
TGTCTGTGACATCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATCGGCAGTAGCACGGCCATCCAGGAGCT
CTTCAAGCACATCTCGGAGCAGTT

WO 2004/030615

PCT/US2003/028547

2738/6881
FIGURE 2518

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLOGFQLTHSLGGGTGSGMGT
LISKIREEYPDRIMNTFSVVPSPAEASNMDLVSEYQQYQDATAEEEEEDFGEEAEEEA

WO 2004/030615

PCT/US2003/028547

2739/6881
FIGURE 2519

GCACCTCGCTGCTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCAGAGAAAAAAAAAATTACTT
ATTTTCTTGCCCCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGACATCC
AGGCTGGTCAGCGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCA
CTGGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCCGTGTACTACAGTGAAGCCACTGATGGCA
AATATGTTCTCGTGCCATACTGGTGGATCTAGAACCCTGGGACCATGGACTCTGTTTCGCTCAGGTCCTTTTGGCC
AGATCTTTAGACCCGCCACGGCCGATACCTCACCGTGGCTGCTGACTTCCGTGGTCGGATGTCCATGAAGGAGGT
CGATGAGCAGATGTTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAAATATCAAGAC
AGCTGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATCGGCAGTAGCACGGCCATCCAGGA
GCTCTTCAAGCACATCTCGGAGCAGTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTCCACTGGTACAC

WO 2004/030615

PCT/US2003/028547

2740/6881
FIGURE 2520

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPATADTSPWLLSSVVGCP

WO 2004/030615

PCT/US2003/028547

2741/6881
FIGURE 2521

CTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCAGAGAAAAAAAAATTACTTATTTTCTTGCC
CCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGACATCCAGGCTGGTCAG
CGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGTCCATGAAGGAGGTCGATGAGCA
GATGTTTAAACGTGCAGAACAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATATCAAGACAGCTGTCTG
TGACATCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATCGGCAGTAGCACGGCCATCCAGGAGCTCTTCAA
GCACATCTCGGAGCAGTTCACTGCCATGTTCCGCCGGAAGGCCCTTCCCTCCACTGGTACACAGGCGAGGGCATGGA
CGAGATGGAGTTACCCGAGGCTGACAGCAACATGAACGACCTCGTCTCTGAGTATCAGCAGTACCAGGATGCCAC
CGCAGAAGAGGAGGAGGATTTCCGGTGAGGAGGCCAAAGAGGAGGCCCTAAGGCAGAGCCCCCATCACCTCAGGCTT
CTCAGTTCCCTTAGCCGTCTTACTCAACTGCCCCTTCTCTCCCTCAGAATTTGTGTTTGCTGCCTCTATCTTG
TTTTTTGTTTTTTCTTCTGGGGAGGGTCTAGAACAGTGCCTGGCACATAGTAGGCACTCAATAAATACTTGTGTTG
TT

WO 2004/030615

PCT/US2003/028547

2742/6881
FIGURE 2522

MREIVHIQAGQQRGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYSEATDGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLOGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVIESYNATLSVHQLVENTDETYCIDNEALYDICFRTLRTTPTYGDL
NHLLRDTMSGVTTCLRFPGLNADLCKLAVNMVFPRLHFFMPGFAPLTSHGSQQYRALTVPELTQQVFDAKSMM
AACDPRHGRYLTVAADFRGRMSMKEVDEQMFNVQNKNSYFVEWIPNNIKTAVCDIPPRGLKMAVTFIGSSTAIQ
ELFKHISEQFTAMFRRKAFLHWYTGEGMDEMEFTEADSNMNDLVSEYQQYQDATAEEEEEDFGEEAKEEA

WO 2004/030615

PCT/US2003/028547

2743/6881
FIGURE 2523

GGGGACGCCGAGGGCGGCTGCGACGCGCCGAGAGGCCGCGGCTCTCCACCTGTCACCCCTGGCCCTTCTCTGCTT
GGATGGTGTCTTCCTCTCCTCAGCCGAGAATGACTTCGTCCACCGGATCCAGGAGGAACGGACCGCTTTCTGCT
GCAGAAGCAGCTGTCAAAGGTTCTTCTTTTCCCCCACTCTCCAGTCGCCTCCGGTACCTGATCCATAGAACAGC
AGAGAATTTTGATCTCTTGAGCAGCTTCTCCGTTGGGGAGGGCTGGAAGAGGAGGACGGTCATCTGTCACCAGGA
CATCAGGGTACCCAGTTCCGATGGCCTCTCTGGCCCCCTGCCGCGCTCCTGCCTCCTGCCCCAGCAGGTACCACGG
TCCTCGGCCCATCTCCAACCAAGGAGCAGCTGCGGTTCCCCGAGGTGCCCGGGCTGGCCGGTGGTATCGTGGACG
CAAGCCTGACCAGCCTTTGTATGTGCCCCGGGTGCTGCGCAGGCAGGAAGAATGGGGGCTGACCTCTACCTCGGT
GCTCAAGAGAGAGGCCCCAGCTGGCAGGGACCCAGAAGAGCCTGGAGATGTTGGTGCTGGAGACCCCAACTCTGA
TCAGGGACTCCCTGTGCTGATGACTCAGGGAACAGAGGACCTAAAGGGCCAGGACAAAGGTGTGAGAAATGAGCC
ACTGCTGGACCCTGTTGGCCCTGAGCCTCTGGGGCCTGAGAGTCAGTCAGGGAAGGGAGACATGGTGGAGATGGC
CACACGTTTTGGGTCCACCCTGCAGCTAGACCTGGAAAAGGGGAAGGAGAGTCTGTTGGAGAAGAGGCTGGTGGC
AGAGGAGGAAGAGGACGAAGAGGAGGTGGAAGAGGATGGCCCCAGCAGCTGCTCGGAGGACGATTACAGTGAGCT
GCTGCAGGAGATCACAGACAACCTGACGAAGAAGGAGATTCAGATAGAGAAGATCCATTTGGACACATCCTCCTT
CGTGGAGGAGCTGCCTGGAGAGAAGGACCTTGCCACGTGGTAGAGATCTATGACTTTGAACCAGCGCTCAAGAC
GGAGGACCTGCTGGCAACGTTTTCTGAGTTCCAAGAGAAGGGGTTTCAGGATTCAGTGGGTGGATGATACTCACGC
ACTCGGCATCTTTCCCTGCCTGGCCTCAGCTGCGGAAGCCCTGACCCGGGAGTTCTCGGTGCTCAAGATCCGGCC
CCTCACACAGGGAACCAAGCAGTCAAAGCTCAAAGCCTTGCAAGAGGCCAAACTCCTGCGTCTGGTGAAGGAGAG
GCCACAGACAAATGCGACTGTGGCCCGGCGGCTGGTGGCCCGGGCCCTGGGACTCCAACACAAAAAGAAAGAGCG
GCCTGCTGTCCGGGGTCCGCTGCCGCCCTTGAGGCCTGGAGACCCAACTGGCCTGGATCTGCGTCCCGACGTAGCT
GGCGCCCCAACACCATAAGCCTTCACAGACGCCAGAGCAGCCCCGACCACCCTCGAGCTTCACCATGGGGTGT
GGTGGGCTTTAGTTTAGTCCCAGAAATGGAGAAAAAATAAAAACTCACGTTGTTCT

WO 2004/030615

PCT/US2003/028547

2744/6881
FIGURE 2524

MTQGTEDLKPGQRCENEPLDPVGPEPLGPESQSGKGDVEMATRFGSTLQLDLEKGKESLLEKRLVAEEEEDE
EEVEEDGPSSCEDDYSELLQEITDNLTKKEIQIEKIHLDTSFVEELPGEKDLAHVVEIYDFEPALKTEDLLAT
FSEFQEKGFRIQWVDDTHALGIFPCLASAAEALTREFSVLKIRPLTQGTKQSKLKALQRPKLLRLVKERPQTNAT
VARRLVARALGLQHKKKERPAVRGPLPP

WO 2004/030615

PCT/US2003/028547

2745/6881
FIGURE 2525

CAGGTACCTGGGGGTGGTTAAGTTGGTGACATGGCTCAGAAGTTTATTTCTTTAAATTTTTTAAGTTTTTTTTCTT
TTTAGTCTTCAGAAAGGCAACAGTAGTCTTTTAAAGTCACTGTTAAAAGTGTAAGACTCTTTTACTCCCTGAGAG
TCCCCCTTTCCCTTTCTTGGCTCCTTTCTCTTTATTCTTTTTTTTTTTTTTTTTTTTTTACTGAGACGGAGTCTCAC
TCTGTGCGCCAGGCTGGAGTGCAGTGGCGCGATCTCGGCTCACTGCAAACCTCCGCCTCCCGGGTTCACCCCTTCT
CTTTATTCTTATCCCGGTOAGACTCGCCCCCTCCTCCAAGACATCTCTCTGTTTTATTTTATTTGATTTTAGTTC
TCTTTGGGTGATCGCTCCTTCCCTCTTCAACGGATCCCTCCCCGCCTCCATCCTCGTTCGTGGGAGAGACCAGC
CTTCTGGTGCTGCAGTCAGGAATGGAGCTTGACAGCGCTCTGGAAGCCCCATCGCAGGAAGACTCTAATTTGTCC
GAGGAGTTGTCTCACTCCGCCTTTGGACAGGCCTTCTCCAAGATTTTACACTGTCTTGCCCGCCCGGAGGCACGA
CGAGGCAATGTAAAAGATGCAGTTCTTAAAGACCTCGGTGATCTAATAGAAGCCACAGAATTTGATAGGTTATTT
GAGGGGACTGGTGCACGGCTCCGCGGAATGCCGGAGACACTGGGGCAGGTAGCAAAAGCCCTGGAGAAGTATGCA
GCCCCCTCCAAGGAGGAGGAAGGTGGAGGTGATGGGCACTCCGAAGCGGCCGAGAAAGCAGCCCAAGTTGGGTTA
CTGTTTCTTAAACTGTTAGGGAAAGTTGAGACTGCTAAGAATTCCCTGGTCGGCCCTGCATGGCAGACGGGCCTG
CATCACTTGGCAGGACCCGTTTATATTTTGGCATCACACACAGCTTGGAGCAACCATGGACCACTCCGAGATCT
CGGGAAGTTGCTAGGGAGGTGCTCACCTCACTGCTTCAAGTTACTGAATGCGGTTCGTGGCAGGATTCCTACAT
GGAGAAAATGAAGATGAGAAAGGGAGACTTTCGGTGATACTAGGGCTTCTCAAACCCGACTTGTATAAGGAATCC
TGGAAGAATAACCTGCCATCAAACATGTTTTCTCATGGACTCTGCAACAGGTCACTCGGCCCTGGCTGAGCCAG
CATCTGGAAGGGTACTTCCCGCATATTGGTCATTTAGATGACTATCAGACTGAGAACAAAATCCTGGGTGTA
CACTGTCTCCATCACATTGTGCTTAATGTG

WO 2004/030615

PCT/US2003/028547

2746/6881
FIGURE 2526

ATGTCCGGGGGCAGCAGCTGCAGCCAGACCCCAAGCCGGGCCATCCCCGCCACTCGCCGGGTGGTGCTCGGCGAC
GGCGTGCAGCTCCCGCCCGGGGACTACAGCACGACCCCGGCGGCACCGTCTTCAGCACCACCCCGGGAGGTACC
AGGATCATCTATGACCGGAAATTCCTGATGGAGTGTGCGGAATCACCTGTGACCAAAACACCCCAAGGGATCTG
CCCACCATTCGGGGGTACCCAGCCCTTCCAGTGATGAGCCCCCATGGAAGCCAGCCAGAGCCACCTGCGCAAT
AGCCCAGAAGATAAGCGGGCGGGCGGTGAAGAGTCACAGTTTGAGATGGACATTAA

WO 2004/030615

PCT/US2003/028547

2747/6881
FIGURE 2527

AAGTGTCCCTCCTACTTCTTGCTGCCTCACGGTTGCTGTTGCAGACCCAGGAGTCTCTGAAGGCTTCCGCGGCT
TTGGGGCCGGTTGTGAGATGCCAGGCAGAGGCCGCTGCCC GGACTGCGGCTCCACGGAGCTGGTGGAAGACTCGC
ACTATTCGAGAGCCAGCTGGTGTGCTCCGACTGCGGCTGCGTGGTACCGAGGGGGTCCTTACCACTACCTTCA
GCGACGAGGGCAATCTCCGAGAGGTAACATATTCCCGAAGCACAGGGGAAAACGAACAAGTTAGTCGCAGCCAGC
AACGAGGTCTCCGGCGAGTGAGAGACCTTTGTGAGTTCTGCAGTTGCCACCAACATTTGAGGATAACCGCGGTTG
CCTACTACCAACAGGCATATCGGCACTCTGGCATCCGAGCGGCCAGGCTGCAAAAAGAAGGAGGTGTTGGTTGGGT
GCTGCGTCTTAATCACCTGCCGACAGCATAACTGGCCCCCTAACAATGGGGGCCATCTGCACGCTGTTGTATGCAG
ATTTGGATGTGTTTTCTAGCACTTGCATGCAGATAGTGAAGCTCCTGGGACTGGATGTGCCATCTCTGTGCTTGG
CAGAACTGGTGAAGACCTATTGCAGCAGCTTCAAACCTGTTCCAAGCTTCACCTTCTGTGCCAGCCAAATACGTGG
AAGACAAAGAGAAGATGCTGTCTCGAACAATGCAGTTGGTGGAGCTGGCAAATGAGACGTGGCTGGTGACCGGGA
GGCATCCCTTGCCCGTCATCACTGCTGCGACTTTCCCTGGCTTGGCAGTCGCTGCAGCCTGCAGATCGGCTTTTCAT
GTTCCCTTGCCCGATTTTGTAAATTGGCAAATGTGGACCTGCCCTACCCGGCGTCTCCCGCCTGCAGGAGCTGC
TGGCTGTGCTGCTGCGGATGGCTGAGCAGCTGGCCTGGTTACGAGTTCTGAGACTTGACAAACGGTCTGTGGTGA
AGCACATCGGTGACCTTCTCCAGCACC GCCAGTCACTGGTCCGCTCTGCCTTTCGGGATGGGACAGCAGAAGTGG
AGACCCGAGAGAAGGAGCCACCGGGGTGGGGACAGGGGCAAGGAGAAGGGGAGGTGGGAAATAATTCCCTTAGGTT
TACCCAGGGGAAGCGGCCGCCAGTCTGCCCCTTCTCTTGCCACCCTGCATGTTGAAGTCCCCGAAGCGGATCT
GCCCTGTACCCCTGTCTCCACTGTCACTGGAGATGAGAACATTTCTGATAGTGAATAGAACAGTATTTGCGTA
CCCCCTCAGGAAGTTAGGGACTTTCAGAGAGCCAGGCTGCTAGACAGGCTGCCACGAGTGTCCCTAACCCCTCCCT
GATGGATATCCACTGGGAGCACTTCATCCTGTTCTGACAGCTTGATAACATTCCTGTTATAACCAAGGATGGAAG
TGTACACAGTCCGTAGGTATTGCTTTTCTTGTTTGAAGGAACCAAGAGGGGCTCTGCCATTAGTTGGACCCTGG
GTCCTGGAGTAAAGTCAGGAGTGCAGGGATGACTATAGGTAGGAGAGATTCCCATCCCTTGGTGTGGGAGAGCAA
GTTGCCTATGTCCATGTTCTGTGAGATGGCTTTCCCTCATAGATGGATGGGAAATGTCAGGCTCTTTGCTGCTGG
TTTGAATTGGACACACTGCTGCGGCTCCTCCTGCAGGCCTGAGGGGGCTTCCCTCTGCTTGTGGAGTGGTTGGCA
TTCCCAGCAGTATCAACCCTCAGAGGAGCGGGAACCTGGGGAATTCCTGGCCCTACGTGCATTACAGGCAATGATG
GGTTTGTGTGATGGTGTGATGAGATCCTCTACCTCATAACAAAAGGACAGTGGGTAGACTAAGGCAGTAGCTCA
AAGGGCTTTGCAAAATTTAATATATTAAAACAAGAGGCATCTGCTAGAAAACATTCTATTGTATAAAACCCGAG
TTCTT

WO 2004/030615

PCT/US2003/028547

2748/6881
FIGURE 2528

MPGRGRCPDCGSTELVEDSHYSQSQLVCSDCGCVVTEGVLTITTFSDGNLREVTYSRSTGENEQVSRSQQRGLRR
VRDLCRVLQLPPTFEDTAVAYYQQAYRHSGIRAARLQKKEVLVGCCVLIITCRQHNWPLTMGAICTLLYADLDVFS
STYMQIVKLLGLDVPSLCLAELVKTYCSSFKLFQASPSVPAKYVEDKEKMLSRTMQLVELANETWLVTGRHPLPV
ITAATFLAWQSLQPADRLSCSLARFCKLANVDLPYPASSRLQELLAVLLRMAEQLAWLRVLRDKRSVVKHIGDL
LQHRQSLVRSAFRDGTAEVETREKEPPGWGQGQGEVGNNSLGLPQGKRPASPALLLPFCMLKSPKRICPVPPV
STVTGDENISDSEIEQYLRTPEVRDFQRAQAARQAATSVPNPP

WO 2004/030615

PCT/US2003/028547

2749/6881
FIGURE 2529

TTCATTGCGCCAGTGACTAAAAAGAGAATTAAATATGGGTGATGTTGAGAAAGGCAAGAAGATTTTTATTATGAA
GTGTTCCCAAGTGCCCACTGTTGAAAAGGGAGGAAAGCACAAAGATTGGGCCAAATCTCCATGGTCTTTTCAGGTG
GAAGACAGGTGAGGCCCTGGATACTCTTACACAGCCGCCAATAAGAACAAATGCATCATCTGGGGAGAGGATAC
ACTGATGGAGTATTTGGAGAATCCCAAGAAGTACATCCCTGGAACAAAAATGATCTTTGTCAGCATTAAAGAAGAA
GGAAGAAAGGGCAGACTTGATAGCTTATCTCAAAAAAGCTACTAATGAGTAATAATTGGCCACTGCCTTATTTAT
TACTACACCAGAATTCAGATCATGAATGACTGACAGAATATTTT

WO 2004/030615

PCT/US2003/028547

2750/6881
FIGURE 2530

GCGACCCCTCTTCTTTGCGTAGAGTTTTTCAGGTTGCTCCTGGAAACCATGCCGAAAGTAGTGTCTCGGTCAGTAG
TCTGCTCTGACACTCGGGACCGGGAGGAATATGACGACGGCGAGAAGCCCCCTCCATGTGTACTACTGTTTGTGCG
GCCAGGTGGTCTTAGTGTCTGGACTGTCAGTTAGAGAAATTGCCCATGAGGCCCGGGACCGGTCCCGTGTGATTG
ATGCTGCCAAACATGCCCATAAGTTTTGTAACACAGAAGACGAAGAGACTATGTATCTGCGGAGACCTGAAGGCA
TTGAACTACAGTACAGAAAGAAATGTGCAAAGTGTGGACTGCTGCTCTTCTACCAATCCCAGCCGAAGAATGCTC
CCGTTACCTTCATTGTGGATGGAGCAGTCGTCAAGTTTGGCCAGGGCTTTGGGAAAACGAACATATATACTCAGA
AACAAGAGCCTCCTAAGAAGGTGATGATGACCAAACGGACCAAAGACATGGGCAAGTTCAGTTCTGTCACTGTGT
CTACCATTGATGAAGAGGAAGAGGAGATTGAGGCTAGGGAAGTTGCTGACTCGTATGCACAGAATGCCAAAGTGA
TTGAAAACAGCTGGAGCGCAAAGGCATGAGCAAGAGGCCACTGCAAGAGCTGGCTGAATGGGAACCCAGGAAA
AGTGAAAATGAAGGGGACCTTTGATTGACAACCAGTTCAAATAACCAGGCTTTTTTCTGAGCCCTAGACTGGAG
GCAAGCATTTAGATCAGGAGACAAAGTAACTTCTTGATTACATAGACTGGTTCCTATTTATATCCCAGCAGAAGG
CTTTATGTTGTTTCCATTGATTCTCCTACATGCAGTGAGGTCTTTAACTGAGTCCATTTGACCTGCTTCT

WO 2004/030615

PCT/US2003/028547

2751/6881
FIGURE 2531

GGCGGCGGCAAGGGCGGGAGGGAGCGGTCGCCGCGGGATTTGGAGCTGCCTAGCCTCGCGGTGCTTTGGCAGCA
TGTAAGCAGCTGTTTGCCAAGAACCCAGGTCACCTGCTAAGAAAGGGTGCCTTCGGGAGAAGAGTGTCAGAGGAT
ACCAATGCCAGATGCATCTGGAGTTACACTCAGCACTCGCAGTATGAGACATTGTGTGCCAGCATCTCTTTCCCTT
CTGGCAAAGACTGTAGCTCTCCAGGTAGGAGGATCCTGGAAGCTGTGAGCACCAGGAGCCTTGCCAGAGGAGGAT
GGGGCCAGATATGAACCTCTTACCATGAACATGGTTCTCGGCTTATGAAGGAATTTTAAGTAAAAACAGTTATTTA
ATTTCCACATATTCAAGTCAAAAGCCTTCTGTGTGAAGTGCCAGTGATTACCCCTCCACAGGAGTTATCAGGATT
TTTCTGGCACCAAGTTTAATTCTTCTTCTGCTACTTCTGGTAGTGACAGATCTGCAGGACAGATTATCTGTTGAAT
GCTCTTGGGCAGGAAAACCATGTAAAACCTCTGGAAGCAGCATCAGGACAGCAGAGCAGAGCCCCGTCCTCACT
GCTCACTTGCACAGAACTCCATCTGGACTCGGATGCTTTTACTGAAGACCCATCTAGCTTCAATCATCTTTAGA
GTCCATCCATTCTGGAGAGACCTGGCGTTTGCAGTTGCCTCCTGTGGCCGTGTTTTCTGTCAATTCTGTTCCCAG
GCCTTCTATTTCAGGCGGTTGAAGGGTGTGGACTTTGGAATGGGGTTTGTCTTCTCGGGAACCTTGCTTCCTTTC
CCTGGCTGGTGTCTGTCAGGAAGGACCATCTGAAGGCTGCAATTTGTTCTTAGGGAGGCAGGTGCTGGCCTGGCCT
GGATCTTCCACCATGTTTCCGTGTGTGCTGCCTTTTGATAGCCTGATTGTCAACCTTCTGGGCATCTCCCTGACTGTC
CTCTTACCCTCCTTCTCGTTTTTCATCATAGTGCCAGCCATTTTGGAGTCTCCTTTGGTATCCGCAAACCTCTAC
ATGAAAAGTCTGTAAAAATCTTTCGTGGGCTACCTTGAGAAATGGAGCGAGGAGCCAAGGAGAAGAACACCAG
CTTTACAAGCCCTACACCAACGGAATCATTGCAAAGGATCCCACTTCACTAGAAGAAGAGATCAAAGAGATTTCGT
CGAAGTGGTAGTAGTAAGGCTCTGGACAACACTCCAGAGTTCGAGCTCTCTGACATTTTCTACTTTTGCCGGA
GGAATGGAGACCATTATGGATGATGAGGTGACAAAGAGATTCTCAGCAGAAGAACTGGAGTCTTGAACCTGCTG
AGCAGAACCAATTATAACTTCCAGTACATCAGCCTTCGGCTCAGGTCCTGTGGGGGTAGGAGTGCTGATTCCG
TACTGCTTCTGTCTGCCGCTCAGGATAGCACTGGCTTTCACAGGGATTAGCCTTCTGGTGGTGGGCACAACTGTG
GTGGGATACTTGCCAAATGGGAGGTTTAAGGAGTTCATGAGTAAACATGTTCACTTAATGTGTTACCGGATCTGC
GTGCGAGCGCTGACAGCCATCATCACCTACCATGACAGGGAAAACAGACCAAGAAATGGTGGCATCTGTGTGGC
AATCATACCTCACCGATCGATGTGATCATCTTGCCAGCGATGGCTATTATGCCATGGTGGGTCAAGTGCACGGG
GGACTCATGGGTGTGATTACAGAGGCCATGGTGAAGGCTGCCACACGCTCTGGTTTGAGCGCTCGGAAGTGAAG
GATCGCCACCTGGTGGCTAAGAGACTGACTGAACATGTGCAAGATAAAAGCAAGCTGCCTATCCTCATCTTCCCA
GAAGGAACCTGCATCAATAATACATCGGTGATGATGTTCAAAAAGGGAAGTTTTGAAATTGGAGCCACAGTTTAC
CCTGTTGCTATCAAGTATGACCCTCAATTTGGCGATGCCTTCTGGAACAGCAGCAAATACGGGATGGTGACGTAC
CTGCTGCGAATGATGACCAGCTGGGCCATTGTCTGCAGCGTGTGGTACCTGCCTCCCATGACTAGAGAGGCAGAT
GAAGATGCTGTCCAGTTTGCGAATAGGGTGAAATCTGCCATTGCCAGGCAGGGAGGACTTGTGGACCTGCTGTGG
GATGGGGGCCCTGAAGAGGGAGAAGGTGAAGGACACGTTCAAGGAGGAGCAGCAGAAGCTGTACAGCAAGATGATC
GTGGGGAACCAACAAGGACAGGAGCCGCTCCTGAGCCCTGCCTCCAGCTGGCTGGGGCCACCGTGCGGGGTGCCAAC
GGGCTCAGAGCTGGAGTTGCCGCCGCCGCCCCACTGCTGTGTCTTTCCAGACTCCAGGGCTCCCCGGGCTGCT
CTGGATCCCAGGACTCCGGCTTTCGCCGAGCCGCGAGCGGGATCCCTGTGCAACCGGCGCAGCCTACCCCTGGTGG
TCTAAACGGATGCTGCTGGGTGTTGCGACCCAGGACGAGATGCCTTGTCTTTTACAATAAGTCGTTGGAGGAA
TGCCATTAAAGTGAACTCCCCACCTTTGCACGCTGTGCGGGCTGAGTGGTTGGGGAGATGTGGCCATGGTCTTGT
GCTAGAGATGGCGGTACAAGAGTCTGTTATGCAAGCCCGTGTGCCAGGGATGTGCTGGGGGCGGCCACCCGCTCT
CCAGGAAAGGCACAGCTGAGGCACTGTGGCTGGCTTTCGGCTCAACATCGCCCCAGCCTTGGAGCTCTGCAGAC
ATGATAGGAAGGAAACTGTCTATCTGCAGGGGCTTTAGCAAAATGAAGGGTTAGATTTTTATGCTGCTGCTGATG
GGGTACTAAAGGGAGGGGAAGAGGCCAGGTGGGCGCTGACTGGCCATGGGAGAACGTGTGTTCTGCTACTCCA
GGCTAACCTGAACTCCCCATGTGATGCGCGCTTGTGTAATGTGTGTCTCGGTTTCCCCATCTGTAATATGAGT
CGGGGGGAATGGTGGTGATTCTACCTCAGGGGCTGTTGTGGGGATTAAAGTGTGCGGGTGAGTGAAGGACAC
ATCAGTTTCAGTGTTCAGTACAGGCCACAAAACGGGGCACGGCAGGCCTGAGCTCAGAGCTGCTGCACTGGG
CTTTGGATTGTCTTGTGAGTAAATAAACTGGCTGGTGAATG

WO 2004/030615

PCT/US2003/028547

2752/6881
FIGURE 2532

MFLLLPFDSLIVNLLGISLTVLFTLLLVFIIVPAIFGVSF GIRKLYMKSLLKIFAWATLRMERGAKEKNHQLYKP
YTNIGIIAKDPTSLEEEIKEIRRGSSKALDNTPEFELSDIFYFCRKG METIMDDEVTKRFSAEELSWNLLSRTN
YNFQYISLRLTVLWGLGVLIRYCFLLPLRIALAF TGISLLVVGTTVVGYPNGRFKEFMSKHVHLMCYRICVRL
TAIITYHDRENRPNGGICVANHTSPIDV IILASDGYAMVGQVHGGLMGVIQRAMVKACPHVWFERSEVKDRHL
VAKRLTEHVQDKSKLPILIFPEGTCINNTSVMMF KKG SFEIGATVYPVAIKYDPQFGDAFWNSSKYGMVTYLLRM
MTSWAIVCSVWYLP PMTREADED AVQFANRVKSAIARQGGLVDLLWDGGLKREKVKDTFKEEQKLYSKMIVGNH
KDRSRS

WO 2004/030615

PCT/US2003/028547

2753/6881
FIGURE 2533

GAACCCTAGGTTGTTGGATGATGTCAGCTTCCATCCTTGTGTTTCGTTTCAAACGCTGGGAATCTGAGCGCATCCT
CTCCTTCATCCTCCTGATGGAACTTCCGCGCTGCTGTCTTACCATGTCAGTGCACAGAATCTGGTTGCAATCCC
AGTGTATGTCAAACATAACATCAGTTTCCGGGACAGTAGTTCCCTTGGACGCTTTGAAATAACGGTGGGACCCAA
GCAGACGATGGGGAAGACCATTGAGGGAGTGATTGTCACCAGCCAGATGCCCAAGGGGGTCTGAAACATGAGCCT
TACTCCATCACAGGGGACACACACATTTCGACCCAGTCACAAAGATGCTGTCTTGGGATGTAGGAAAAATAAATCC
ACAAAAGCTACCAAGTTTGAAGGGGACCATGAGTCTTCAGGCTGGAGCTTCCAAACCAGATGAAAACCCCACAAT
TAACCTGCAGTTTAAGATCCAGCAGCTGGCCATTTCTGGACTCAAGGTGAATCGTCTGGATATGTATGGAGAAAA
GTACAAACCCTTTAAGGGCATAAAATACATGACCAAAGCTGGGAAGTTCCAAGTTCGAACCTGAAGGGAGCATT
GCTGAGGGAATAGTCTTGACATTTTTCTATTTCTTACTTGTCTAAAAAGTAAAAAATAATCAGCCTGTCTCCT
AGGTCAGTCCCCTCCTGGACCCACCGCTCCCTTTTTCTTAGCCTTCAGTGCCATGGAACCTAATCAAGGGAGG
AAAAGGTCACCAGGGAGAACTGGACAGAACTGAAACACAGCAACACCAAGTTCTCAAGGACAAGGTGTGTGATGGG
GGTAGGAAGCTTGGTGCTTATGTAACATTTTAAACGTGGTTTCTATAGGAAAGACCAACATTTGTTTAGCTTGC
TTGGCTTTAATTATCTAAAGCCAATGAAAGACTTCTTTGTTGATTTTTTAAGATAGAAAGATTAAAAAGAAAGAA
AGATGGGAAGAAAATGAATGTTAGTCAAGGAAAGGCCACTTAAGGATCTGCTCTATGAAGGAGAAGAAAGAGGAA
AAAGAAGTAAAGGAGTTAGGAGGAGACACTTAAATGAAAGATTGGCAAGAAAAGCAGTCGGACTCTACCTTAAGG
AGGGATGGGAAGGAAAGAGTTGAGTTGGTTTCTTTCTGATTCTCTACTCATGTAGAAAACACTTGTACTTCTGG
AAATGGACTGGAGACTTTTTAAATTTGAGTCCACTATTGACATGGAAACCCAGTGAATCAGATTTTCCCTCAA
AGACCATGATGGTATCGGACTAGTTTTGAGACACTGCCTGTTGCTGTCCATCAGCACTTGGTCTCTTATCTTCAG
TGAGAAGGTGACCCGCCTTCTCCCATGGTGGCTGCCTAAAGTGCTTCTTTCTAACCCAAAACAGTTCTACTCA
CTTCTTTTACAGAATTCACCGGCCATTTTCTGTTACCTGATCCTTCTACAGGATTTTTAAAAAGTAAGAGAGT
TTCAGAGAAGCCGATCCCATAAATCCCCAGTGCAGCCAGGGTTTGTGTGTCATCGTACTGGAGTAGAGGGCCGACT
CTTCCCATGAAGGTGAGCACAGCTGTGAGTGAGTGAGCTCATATCTCCATTTGTGAGTGTGGACTGGTACCAGA
TCGTAACCTTCCCGTTGGTCGGAACTTTTCCATCTGTGCGCCTAGAAAAAGAGAAAGCTTACCATCGAGGGTGT
GGTTGATCCTTGAAGCTGCTTGGTAAAGTTATCATTTCCTCAGTCTTTTCTTTTGTACTCCTAICATGTATTCA
TAATATCTACCAGTCCCTTTTCAATTCTAAGACAAAACATTTCTCCTAAATCTCTGAATAAAATCAGTGCTGTAGG
AAGATGGACTGTGTTGATCATGGGTGTAAGCAACCCAGTTTAAAGAAACATGGCAACTAAAGGGATACCTCAGGCT
TTCTTTCCAGTGGGTCAATTTTGTCTAGTTTCAAGTGTGTCTGTACTATTTAAATATTTATACAAAAGGGTTTT
TGTTTATAGCTTAAGGAATGATAGTGTGCTCTGCTTGGTGCATGGAGAAAAAGGAAGACCCATACTCTCCACACC
CTAGAGCTTTTCTCTAAATATTTGTGCAAAGTTTTTGCTAGTTTTATCTTCTGACTTTGGGACTAGTTTTTGTCTGC
AGAGTTGTGTGCTTTGTGATTTTCTCTGGGATAGTGTACTGTACACAACCAGATGTGTTCCACACTCCGTGAC
TCCGCAGTTTGTCTGGAGTGACATACACATCCACCATGGAAAGGGAAGCATCTCTGCCTGTGGATTCTCAAGTA
CTTGGAAAGCACCTCTCCTGAGGAACCTACAGGATTCTAAGGTTTCTAGGTCAGTGAACAACCTAATCTTGGTCCC
TGAATATTTCTAGGTTTGTAAAGTGCAGCAGTTTTATTTCTCTAGAACTCATCTGTTTCAAGGGAAGTACCTAA
GAAGATATAGAGTGTCTTCTAGGGTAAGGGACCTGCAGGTGTAAGCATAGATGAAATAACTGTCCTGTACACGTG
CAGCAGGCCATGGAGTGTAGCGGGCATCGCTGCCGCCATTCTGTCAGCATCACCATAAGCAGTGCAGGGTGTCTC
CATCGAGCTGTTTGGTTCCATGTGTGTTTAAATGTGTCAGAAGTAGCTTCTCTGTTTAAAGTTTAAAGTTGAG
TTTACCAGTC

WO 2004/030615

PCT/US2003/028547

2754/6881
FIGURE 2534

ATGGCCCTGTCCACTGAGCATCCTCCCGCCACACAGAAACCCGCCAGCCGGGGCCACCGACCCACCCCCTGCC
TGGAACCTTAAGGAGGCCGGAGCTGTGGGGAGCTCAGAGCTGAGATCCTACAGGAGTCCAGGGCTGGAGAGAAAA
CCTCTGCGAGGAAAGGGAAGGAGCAAGCCGTGAATTTAAGGGACGCTGTGAAGCAATCATGGATGCAATGAAGAG
AGGGCTCTGCTGTGTGCTGCTGCTGTGTGGAGCAGTCTTCGTTTCGCCAGCCAGGAAATCCATGCCCGATTTCAG
AAGAGGAGCCAGATCTTACCAAGTGATCTGCAGAGATGAAAAACGCAGATGATATACCAGCAACATCAGTCATG
GCTGCGCCCTGTGCTCAGAAGCAACCGGGTGGAATATTGCTGGTGCAACAGTGGCAGGGGCACAGTGCCACTCAGT
GCCTGTCAAAAGTTGCAGCGAGCCAAGGTGTTTCAACGGGGGCACCTGCCAGCAGGCCCTGTACTTCTCAGATTT
CGTGTGCCAGTGCCCCGAAGGATTTGCTGGGAAGTGCTGTGAAATAGATACCAGGGCCACGTGCTACGAGGACCA
GGGCATCAGCTACAGGGGCACGTGGAGCACAGCGGAGAGTGGCGCCGAGTGCACCAACTGGAACAGCAGCGCGTT
GGCCAGAAAGCCCTACAGCGGGCGGAGGCCAGACGCCATCAGGCTGGGCCCTGGGGAAACCACAACTACTGCAGAAA
CCCAGATCGAGACTCAAAGCCCTGGTGCTACGTCTTTAAGCGGGGAAGTACAGCTCAGAGTTCTGCAGCACCCC
TGCCTGCTCTGAGGGAAACAGTGACTGCTACTTTGGGAATGGGTGAGCCTACCGTGGCAGCGACAGCCTCACCGA
GTCGGGTGCCTCCTGCCTCCCGTGGAATTCATGATCCTGATAGGCAAGGTTTACACAGCACAGAAACCCAGTG
CCAGGCACTGGGCCCTGGGCAACATAATTACTGCCGGAATCCTGATGGGGATGCCAAGCCCTGGTGCCACGTGCT
GAAGAACCGCAGGCTGACGTGGGAGTACTGTGATGTGCCCTCCTGCTCCACCTGCGGCCCTGAGACAGTACAGCCA
GCCTCAGTTTCGCATCAAAGGAGGGCTCTTCGCCGACATCGCCTCCACCCCTGGCAGGCTGCCATCTTTGCCAA
GCACAGGAGGTGCGCCGGAGAGCGGTTTCTGTGCGGGGGCATACTCATCAGCTCCTGCTGGATTCTCTCTGCCGC
CCACTGCTTCCAGGAGAGGTTTCCGCCCCACCACCTGACGGTGATCTTGGGCAGAACATAACCGGGTGGTCCCTGG
CGAGGAGGAGCAGAAATTTGAAGTCGAAAAATACATTGTCCATAAGGAATTCGATGATGACACTTACGACAATGA
CATTGCGCTGCTGCAGCTGAAATCGGATTGCTCCCGCTGTGCCCAGGAGAGCAGCGTGGTCCGCACTGTGTGCCT
TCCCCGGCGGACCTGCAGCTGCCGGACTGGACGGAGTGTGAGCTCTCCGGCTACGGCAAGCATGAGGCCTTGTC
TCCTTTCTATTTCGGAGCGGCTGAAGGAGGCTCATGTGCTGCTGGAGACACTCGGAGCGGCGGGCCCCAGGCAAACTTGCA
CGACGCCTGCCAGGGCGATTTCGGGAGGCCCCCTGGTGTGTCTGAACGATGGCCGCATGACTTTGGTGGGCATCAT
CAGCTGGGGCCTGGGCTGTGGACAGAAGGATGTCCCGGGTGTGTACACCAAGGTTACCAACTACCTAGACTGGAT
TCGTGACAACATGCGACCGTGACCAGGAACACCCGACTCCTCAAAAGCAAATGAGATCCCGCCTCTTCTTCTTCA
GAAGACACTGCAAAGGCGCAGTGCTTCTCTACAGACTTCTCCAGACCCACCACCCGAGAAAGCGGGACGAGACC
CTACAGGAGAGGGAAGAGTGCAATTTCCAGATACTTCCATTTTGGAAGTTTTCAGGACTTGGTCTGATTTTCAG
GATACTCTGTGATGAGGGAAGACATGAATGCACACTAGCCTCTCCAGGAATGCCCTCCTCCCTGGGCAGAAAGTGG
CCATGCCACCCTGTTTTAGCTAAAGCCCAACCTCCTGACCTGTACCGTGAGCAGCTTTGGAAACAGGACCACA
AAAATGAAAGCATGTCTCAATAGTAAAAGATAACAAGATCTTTCAGGAAAGACGGATTGCATTAGAAATAGACAG
TATATTTATAGTCACAAGAGCCCAGCAGGGCCTCAAAGTTGGGGCAGGCTGGCTGGCCCCGTGATGTTCTCTCAAAA
GCACCCCTTGACGTCAAGTCTCCTTCCCTTTCCCACTCCCTGGCTCTCAGAAGGTATTCTTTTGTGTACAGTG
TGTAAGTGTAATCCTTTTTCTTTATAAACTTTAGAGTAGCATGAGAGAATTGTATCATTTGAACAACAGGCT
TCAGCATATTTATAGCAATCCATGTTAGTTTTTACTTTCTGTTGCCACAACCCGTGTTTTATACTGTACTTAATAA
ATTCAGATATATTTTTACAGTTTTTCC

WO 2004/030615

PCT/US2003/028547

2755/6881
FIGURE 2535

MDAMKRGLCCVLLLCGAVFVSPSQEI HARFRRGARSYQVICRDEKTQMIYQQHQSWLRPVLR SNRVEYCWNSGR
AQCHSVPVKSCSEPRCFNGGTCQQALYFSD FVCQCEGFAGKCCEIDTRATCYEDQGISYRG TWSTAESGAECTN
WNSSALAQKPYSGRRPDAIRLGLGNHNYCRNPDRDSKPWCYVFKAGKYSSEFCSTPACSEGNSDCYFGNGSAYRG
THSLTESGASCLPWNSMILIGKVYTAQNPSAQALGLGKHNYCRNPDGDAKPWCHVLKNRRLTWEYCDVPSCSTCG
LRQYSQPQFRIKGGLFADIASHPWQAAIFAKHRRSPGERFLCGGILISSCWILSAAHCFQERFPPHHLTVILGRT
YRVVPGEEEQKFVEKEYIVHKEFDDDTYDNDIAL LQLKSDSSRCAQESSVVRTVCLPPADLQLPDWTECELSGYG
KHEALSPFYSERLKEAHVRLYPSSRCTSQHLLNRTVTDNMLCAGDTRSGGPQANLHDACQGDSSGGPLVCLNDGRM
TLVGII SWGLGCGQKDVPGVYTKVTNYLDWIRDNMRP

WO 2004/030615

PCT/US2003/028547

2756/6881
FIGURE 2536

ATGGCCCTGTCCACTGAGCATCCTCCCGCCACACAGAAACCCGCCAGCCGGGGCCACCGACCCACCCCCTGCC
TGGAAACTTAAGGAGGCCGGAGCTGTGGGGAGCTCAGAGCTGAGATCCTACAGGAGTCCAGGGCTGGAGAGAAAA
CCTCTGCGAGGAAAGGGAAGGAGCAAGCCGTGAATTTAAGGGACGCTGTGAAGCAATCATGGATGCAATGAAGAG
AGGGCTCTGCTGTGTGCTGCTGCTGTGTGGAGCAGTCTTCGTTTCGCCCAGCCAGGAAATCCATGCCCGATTTCAG
AAGAGGAGCCAGATCTTACCAAGTGATCTGCAGAGATGAAAAACGCAGATGATATACCAGCAACATCAGTCATG
GCTGCGCCCTGTGCTCAGAAGCAACCGGGTGGAATATTGCTGGTGCAACAGTGGCAGGGCACAGTGCCACTCAGT
GCCTGTCAAAGTTGCAGCGAGCCAAGGTGTTTCAACGGGGGCACCTGCCAGCAGGGCCCTGTACTTCTCAGATTT
CGTGTGCCAGTGCCCCGAAGGATTTGCTGGGAAGTGCTGTGAAATAGATACCAGGGCCACGTGCTACGAGGACCA
GGGCATCAGCTACAGGGGCACGTGGAGCACAGCGGAGAGTGGCGCCGAGTGCACCAACTGGAACAGCAGCGCGTT
GGCCCAGAAGCCCTACAGCGGGCGGAGGCCAGACGCCATCAGGCTGGGCCCTGGGGAACCACAACTACTGCAGAAA
CCCAGATCGAGACTCAAAGCCCTGGTGCTACGTCTTTAAGGCGGGGAAGTACAGCTCAGAGTTCTGCAGCACCCC
TGCCCTGCTCTGAGGGAAACAGTGACTGCTACTTTGGGAATGGGTGAGCCTACCGTGGCACGCACAGCCTCACCGA
GTCGGGTGCCTCCTGCCTCCCGTGGAATTCATGATCCTGATAGGCAAGGTTTACACAGCACAGAACCCAGTG
CCAGGCACTGGGCCTGGGCAAACATAATTACTGCCGACTGGACGGAGTGTGAGCTCTCCGGCTACGGCAAGCAT
GAGGCCTTGCTCTCCTTTCTATTTCGGAGCGGCTGAAGGAGGCTCATGTGAGACTGTACCCATCCAGCCGCTGCACA
TCACAACATTTACTTAACAGAACAGTCACCGACAACATGCTGTGTGCTGGAGACACTCGGAGCGGGGGCCCCAG
GCAAACCTGCACGACGCCTGCCAGGGCGATTGGGAGGGCCCCCTGGTGTGTCTGAACGATGGCCGCATGACTTTG
GTGGGCATCATCAGCTGGGGCCTGGGCTGTGGACAGAAGGATGTCCCGGTGTGTACACCAAGGTTACCAACTAC
CTAGACTGGATTCTGTGACAACATGCGACCGTGACCAGGAACACCCGACTCCTCAAAGCAAATGAGATCCCGCCT
CTTCTTCTCAGAAGACACTGCAAAGGCGCAGTGCTTCTCTACAGACTTCTCCAGACCCACCACCCGCAGAAGC
GGGACGAGACCCTACAGGAGAGGGAAGAGTGCAATTTCCAGATACTTCCATTTTGGAAGTTTTCAGGACTTGG
TCTGATTTTCAGGATACTCTGTGAGATGGGAAGACATGAATGCACACTAGCCTCTCCAGGAATGCCTCCTCCCTGG
GCAGAAAGTGGCCATGCCACCCTGTTTTTCAGCTAAAGCCCAACCTCCTGACCTGTCACCGTGAGCAGCTTTGGAA
ACAGGACCACAAAAATGAAAGCATGTCTCAATAGTAAAAGATAACAAGATCTTTCAGGAAAGACGGATTGCATTA
GAAATAGACAGTATATTTATAGTCACAAGAGCCCAGCAGGGCCTCAAAGTTGGGGCAGGCTGGCTGGCCCCGTCAT
GTTCCCTCAAAGCACCCCTTGACGTCAAGTCTCCTTCCCCTTCCCCACTCCCTGGCTCTCAGAAGGTATTCCCTT
TGTGTACAGTGTGTAAAGTGTAATCCTTTTTCTTTATAAACTTTAGAGTAGCATGAGAGAATTGTATCATTTGA
ACAACCTAGGCTTCAGCATATTTATAGCAATCCATGTTAGTTTTTACTTTCTGTTGCCACAACCCCTGTTTTATACT
GTACTTAATAAATTCAGATATATTTTTTACAGTTTTTCCAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2757/6881
FIGURE 2537

MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARSYQVICRDEKTQMIYQQHQS WL RPVLRSNRVEYCWCNSGR
AQCHSVPVKSCSEPRCFNGGTCQQALYFSD FVCQCEGFAGKCCEIDTRATCYEDQGISYRG TWSTAESGAECTN
WNSSALAQKPYSGRRPDAIRLGLGNHNYCRNPDRDSKPWCYVFKAGKYSSEFCSTPACSEGNSDCYFGNGSAYRG
THSLTESGASCLPWNSMILIGKVYTAQNPSA QALGLGKHNYCRTGRSVSSPATASMRPCLLSIRSG

WO 2004/030615

PCT/US2003/028547

2758/6881
FIGURE 2538

ATGGCCCTGTCCACTGAGCATCCTCCCGCCACACAGAAACCCGCCAGCCGGGGCCACCGACCCCAACCCCTGCC
TGGAAACTTAAGGAGGCCGAGCTGTGGGGAGCTCAGAGCTGAGATCCTACAGGAGTCCAGGGCTGGAGAGAAAA
CCTCTGCGAGGAAAGGGAAGGAGCAAGCCGTGAATTTAAGGGACGCTGTGAAGCAATCATGGATGCAATGAAGAG
AGGGCTCTGCTGTGTGCTGCTGCTGTGTGGAGCAGTCTTCGTTTTCGCCAGCCAGGAAATCCATGCCCGATTGAG
AAGAGGAGCCAGATCTTACCAAGGTTGCAGCGAGCCAAGGTGTTTCAACGGGGGCACCTGCCAGCAGGCCCTGTA
CTTCTCAGATTTTCGTGTGCCAGTGCCCCGAAGGATTTGCTGGGAAGTGCTGTGAAATAGATACCAGGGCCACGTG
CTACGAGGACCAGGGCATCAGCTACAGGGGCACGTGGAGCACAGCGGAGAGTGGCGCCGAGTGCCAACTGGAA
CAGCAGCGCGTTGGCCAGAAGCCCTACAGCGGGCGGAGGCCAGACGCCATCAGGCTGGGCCTGGGGAAACCACAA
CTACTGCAGAAACCCAGATCGAGACTCAAAGCCCTGGTGCTACGTCTTTAAGCGGGGAAGTACAGCTCAGAGTT
CTGCAGCACCCCTGCCTGCTCTGAGGGAAACAGTGACTGCTACTTTGGGAATGGGTGACGCTACCGTGGCACGCA
CAGCCTCACCGAGTCGGGTGCCTCCTGCCTCCCGTGGAATTCATGATCCTGATAGGCAAGGTTTACACAGCACA
GAACCCAGTGCCAGGCACTGGGCCTGGGCAAACATAATTACTGCCGGAATCCTGATGGGGATGCCAAGCCCTG
GTGCCACGTGCTGAAGAACCGCAGGCTGACGTGGGAGTACTGTGATGTGCCCTCCTGCTCCACCTGCGGCCTGAG
ACAGTACAGCCAGCCTCAGTTTCGCATCAAAGGAGGGCTCTTCGCCGACATCGCCTCCCAACCCCTGGCAGGCTGC
CATCTTTGCCAAGCACAGGAGGTGCCCCGAGAGCGGTTCCGTGTGCGGGGGCATACTCATCAGCTCCTGCTGGAT
TCTCTCTGCCGCCCACTGCTTCCAGGAGAGGTTTCCGCCCCACCCTGACGGTGATCTTGGGCAGAACATAACCG
GGTGGTCCCTGGCGAGGAGGAGCAGAAATTTGAAGTCGAAAAATACATTGTCCATAAGGAATTCGATGATGACAC
TTACGACAATGACATTGCGCTGCTGCAGCTGAAATCGGATTCGTCCCGCTGTGCCAGGAGAGCAGCGTGGTCCG
CACTGTGTGCCTTCCCCCGGCGGACCTGCAGCTGCCGGAAGTGGACGGAGTGTGAGCTCTCCGGCTACGGCAAGCA
TGAGGCCTTGCTCTCCTTTCTATTTCGGAGCGGCTGAAGGAGGCTCATGTCAGACTGTACCCATCCAGCCGCTGCAC
ATCACAACATTTACTTAACAGAACAGTCACCGACAACATGCTGTGTGCTGGAGACACTCGGAGCGGGCGGGCCCA
GGCAAACCTGCACGACGCCTGCCAGGGCGATTCCGGGAGGGCCCCCTGGTGTGTCTGAACGATGGCCGCATGACTTT
GGTGGGCATCATCAGCTGGGGCCTGGGCTGTGGACAGAAGGATGTCCCGGTGTGTACACCAAGGTTACCAACTA
CCTAGACTGGATTCTGTGACAACATGCGACCGTGACCAGGGAACACCCGACTCCTCAAAAGCAAATGAGATCCCGCC
TCTTCTTCTTCAGAAGACACTGCAAAGGCGCAGTGCTTCTCTACAGACTTCTCCAGACCCACCACACCGCAGAAG
CGGACGAGACCCCTACAGGAGAGGGAAGAGTGCAATTTCCAGATACTTCCCATTTTGGAAGTTTTAGGACTTG
GTCTGATTTTCAAGTACTCTGTCTCAGATGGGAAGACATGAATGCACACTAGCCTCTCCAGGAATGCCTCCTCCCTG
GGCAGAAAGTGGCCATGCCACCCCTGTTTTAGCTAAAGCCCAACCTCCTGACCTGTACCGTGAGCAGCTTTGGA
AACAGGACCACAAAAATGAAAGCATGTCTCAATAGTAAAGATAACAAGATCTTTCAGGAAAGACGGATTGCATT
AGAAATAGACAGTATATTTATAGTCACAAGAGCCAGCAGGGCCCTCAAAGTTGGGGCAGGCTGGCTGGCCCGTCA
TGTTCTTCAAAGCACCCCTTGACGTCAAGTCTCCTTCCCTTTTCCCACTCCCTGGCTCTCAGAAGGTATTCCTT
TTGTGTACAGTGTGTAAAGTGTAAATCCTTTTCTTTATAAACTTTAGAGTAGCATGAGAGAATTGTATCATTTG
AACAACTAGGCTTCAGCATATTTATAGCAATCCATGTTAGTTTTTACTTTCTGTTGCCACAACCCGTGTTTTATAC
TGTACTTAATAAATTCAGATATATTTTTCACAGTTTTTCCAAAAA

WO 2004/030615

PCT/US2003/028547

2759/6881
FIGURE 2539

MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARSYQGCSEPRCFNGGTCQQALYFSDFVCQCPEGFAGKCCEI
DTRATCYEDQGISYRGTWSTAESGAECTNWNSSALAQKPYSGRRPDAILGLGNHNYCRNPD RD SKPWCYVFKAG
KYSSEFCSTPACSEGNSDCYFGNGSAYRGTHSLTESGASCLPWNSMILIGKVYTAQNPSAQAALGLGKHNYCRNPD
GDAKPWCHVLKNRRLTWEYCDVPSCSTCGLRQYSQPQFRIKGGFLADIASHPWQA A IFAKHRRSPGERFLCGGIL
ISSCWILSAAHCFQERFPPHHLTVILGR TYRVVPGE E EQFEVEKYIVHKEFDDDTYDND IALLQLKSDSSRCAQ
ESSVVRTVCLPPADLQLPDWTECELSGYGKHEALSPFYSERLKEAHVRLYPSSRCTSQHLLNRTVTDNMLCAGDT
RSGGPQANLHDACQGDSGGPLVCLNDGRMTLVGI ISWGLGCGQKDVPGVYTKVTNYLDWIRDNM RP

WO 2004/030615

PCT/US2003/028547

2760/6881
FIGURE 2540

GGAGGGGCGGGGCTCCGCCACCACCTCAGCTGCGGACCGAGGCGAGATGGCGGCCACCGAGGGGGTCGGGGAGG
CTGCGCAAGGGGGCGAGCCCGGGCAGCCGGCGCAACCCCGCCCCAGCCGCACCCACCGCCGCCCCAGCAGCAGC
ACAAGGAAGAGATGGCGGCCGAGGCTGGGGAAGCCGTGGCGTCCCCCATGGACGACGGGTTTGTGAGCCTGGACT
CGCCCTCCTATGTCCTGTACAGGGACAGAGCAGAATGGGCTGATATAGATCCGGTGCCGCAGAATGATGGCCCCA
ATCCCGTGGTCCAGATCATTTATAGTGACAAATGTAAGTTTTTTATGATTACTTCCGAGCTGTCCTGCAGCGTGA
TGAAAGAAGTGAACGAGCTTTTAAGCTAACCCGGGATGCTATTGAGTTAAATGCAGCCAATTATACAGTGTGGCA
TTTCCGGAGAGTTCTTTTGAAGTCACTTCAGAAGGATCTACATGAGGAAATGAACTACATCACTGCAATAATTGA
GGAGCAGCCCCAAAACATCAAGTTTGGCATCATAGGCGAGTATTAGTGGAATGGCTAAGAGATCCATCTCAGGA
GCTTGAATTTATTGCTGATATTCTTAATCAGGATGCAAAGAATTATCATGCCTGGCAGCATCGACAATGGGTTAT
TCAGGTATT

WO 2004/030615

PCT/US2003/028547

2761/6881
FIGURE 2541

AACTTTTAAAACTCTCATTGGAGTAAGTCTTTTCAAGATGATCCTCCACAATGGAGGCAGCGTTCCTACTTGTC
ATCACACAGCTGAAGACATTGTTTCTTAGGTGTGAAATCGGGGACAAAGGACAAACAGAGACACACGGCATTGTT
CATGGGAGGCATCGTCACCTCCTGGGTGTTCTGTGGGAATTTCTGTGTGAGGAAAACGTGGCCACAGGGTTGT
GCTGTACCCACCCTTCCCCGGCGAGATGGCCCTCGGCCTGTGCCGCTGCTTCCACCCTCGCCACTCCATGGCAGC
TTTTGGTCTGTTTCCGGCTCTGCCCTCTGCCCTGAACTCTCATCCGGCTTGTAACCTGCCTGCTGGACCCCTCCAC
CTGGAGGCCAGCCCATGTCTCAGGCCAGCCCTAGCCTCTTCTCCTCAAATTCTAAGTGTTTCTCTTTAGGTTT
CCCTGGCTTTGTGAATGGATCATGTGTCTCTAGGTATAAACCTGACATCATCTTCCACCCGGCTTACCTCCACC
AGATCTCCCCAGTTCTGTCTCCATCTTCTGCCTGCAGCTGCTCTGTTCTCATGGTCACTGCTGCATCACTGAGTC
TGGACCCCTTGTTATCATTTTCAAACCTGGCCCTCCTTCCCTCGTTCCCCACTTCTTAAAGTCACCTGTCCATTGCCA
CCAGATTAAGCTTTCTCCAGCCAGATCACCTCTCTCTGAGAAACCTCCATTGACATGGAAACACCATTGTCTGGC
ACACATACTCACATACCCACCTTCCCGTCTTGATCCCCACACATCTTCCAGCCTCCCCTCCCACTCCACTCCCT
GCTCTCTCCTCCACCTCCCCATCCTCTTGCTCTCCCTCCCTCTGAATCCAGCCCAGCGGGGCTTCTCCTGCCTC
CATCACATCACAGAAGTACCTCCTGCTTCTGGTTTTAATTAGAGCCTTCCCCGATTACATTTTCTCTGAATTTT
TTCCTATCTACATTTGATCTGTCTGTTTAAACCCCTACTTCTAAGGGAACTTCTCTAATCTCTTATCCTCATC
CCCAAATAGTGTTTTCTTCTCTGGGTCTTATAATGTTGGTATCAATCTCACAGCATTTAGTGCTTCTGCTG
GTGTGACAGTTACCTGTGTGCATGTGCAATTTCTAATTTCCCACGCTAGACTGTGAGCTTCTAAGGCAAGAATC
ATGCCTCGTTGGTTTCTGTATTCCTCATGGTGCCAAACACAGTGCCTTCTACATTGCAGGCGCTGAATAAACATT
TTTAAAGCAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2762/6881
FIGURE 2542

MALGLCRCFHPRHSMAAFGLFPALPSALNSHPACTCLLDPSTWRPAHVSGPALASSPQILSVFSLGFFPGFVNGSC
VSRYPDIIFPPGLPPDLPSVSIFCLQLLCSHGHCITESGLLSFSNWPPSLVPHFLKSPVHCHQIKLSPAR
SPLSEKPPLTWKHHCLAHILTYPPSRDPHTSFQPPLPLHSLSPPPPHPLVSPPL

PCT/US2003/028547

[illegible]

WO 2004/030615

PCT/US2003/028547

2764/6881
FIGURE 2543B

ACCCTGGATGAGCGACTTCAAAGTGGAGTTCCTGAGAAATGAGCTGGAGATTCCCGGTCAGTATGACGGTAGGGG
AAAGCCATTGCCAGAGTACCACGTGCGAATCGCCGGGTTTGATGAGCGGGTGACAGTCATGGCGTCTCTGCGAAG
GCCCCAAGCGCATCATCATCCGTGGCCATGACGAGAGGGGAACACCCCTTTCCTGGTGAAGGGTGGCGAGGACCTGCG
GCAGGACCAGCGCGTGGAGCAGCTCTCCAGGTCATGAATGGGATCCTGGCCCAAGACTCCGCCTGCAGCCAGAG
GGCCCTGCAGCTGAGGACCTATAGCGTTGTGCCCATGACCTCCAGGTTAGGATTAATTGAGTGGCTTGAAAATAC
TGTTACCTTGAAGGACCTTCTTTTGAACACCATGTCCCAAGAGGAGAAGGCGGCTTACCTGAGTGATCCCAGGGC
ACCGCCGTGTGAATATAAAGATTGGCTGACAAAAATGTCAGGAAAACATGATGTTGGAGCTTACATGCTAATGTA
TAAGGGCGCTAATCGTACTGAAACAGTCACGTCCTTTTAGAAAACGAGAAAAGTAAAGTGCCTGCTGATCTCTTAAA
GCGGGCCTTCGTGAGGATGAGTACAAGCCCTGAGGCTTTCCTGGCGCTCCGCTCCCACTTCGCCAGCTCTCACGC
TCTGATATGCATCAGCCACTGGATCCTCGGGATTGGAGACAGACATCTGAACAACCTTTATGGTGGCCATGGAGAC
TGGCGGCGTGATCGGGATCGACTTTGGGCATGCGTTTGATCCGCTACACAGTTTCTGCCAGTCCCTGAGTTGAT
GCCTTTTCGGCTAACTCGCCAGTTTATCAATCTGATGTTACCAATGAAAGAAACGGGCTTATGTACAGCATCAT
GGTACACGCACTCCGGGCCTTCGCTCAGACCCTGGCCTGCTCACCAACACCATGGATGTGTTTGTCAAGGAGCC
CTCCTTTGATTGGAAAAATTTTGAACAGAAAATGCTGAAAAAAGGAGGGTCATGGATTCAAGAAATAAATGTTGC
TGAAAAAATTGGTACCCCCGACAGAAAATATGTTACGCTAAGAGAAAGTTAGCAGGTGCCAATCCAGCAGTCAT
TACTTGTGATGAGCTACTCCTGGGTGATGAGAAGGCCCTGCCTTCAAAGACTATGTGGCTGTGGCACGAGGAAG
CAAAGATCACACATTTCGTGCCCCAAGAACCAGAGAGTGGGCTTTCAGAAGAGACTCAAGTGAAGTGCCTGATGGA
CCAGGCAACAGACCCCAACATCCTTGGCAGAACCTGGGAAGGATGGGAGCCCTGGATGTGA

WO 2004/030615

PCT/US2003/028547

2765/6881
FIGURE 2544

GGAGTCCGCGAGCGTCGTCCGCAAGCGGCCGCCTTTCCACGGTAACCGCGCGCCGGCGGGGAGGGCGTGCGCGG
AGCCGACGGGAACGTCCGCGCTGCGGAGCAGGGCAGGGAAGCCGGGAGGCGGGCCCGGCCGAGCTTGTCCTTGT
CGCGCAGGTACTCCGAGCACTATGTCTCCCGGCGTCGACCCCGAGCCGCCGCGGCAGCCGGCGTGGAAGGGCC
ACCCCCGCCCAGACGCCTCGGAGTGAGGATGCCAGGTCATCTCCCTCTCAGAGACGTAGAGGCGAGGATTCCACC
TCCACGGGGGAGTTGCAGCCGATGCCAACCTCGCCTGGAGTGGACCTGCAGAGCCCTGCTGCGCAGGACGTGCTG
TTTTCCAGCCCTCCCCAAATGCATTCTTCAGCTATCCCTCTTGACTTTGATGTTAGTTCACCACTGACATACGGC
ACTCCCAGCTCTCGGGTAGAGGGAACCCCAAGAAGTGGTGTAGGGGCACACCTGTGAGACAGAGGCCTGACCTG
GGCTCTGCACAGAAGGGCCTGCAAGTGGATCTGCAGTCTGACGGGCGAGCAGCAGAAGATATAGTGGCAAGTGAG
CAGTCTCTAGGCCAAAACTTGTGATCTGGGGAACAGATGTAAATGTGGCAGCATGCAAAAGAAAACTTTTCAGAGA
TTTCTTCAGCGTTTTATTGACCCTCTGGCTAAAGAAGAAGAAAAATGTTGGCATAGATATTACTGAACCTCTATAC
ATGCAACGACTTGGGGAGATTAATGTTATTGGTGAGCCATTTTAAATGTGAAGTGTGAACACATCAAAATCATTT
GACAAAAATTTGTACAGACAACCTCATCTCTTACCCACAGGAAGTTATTCCAACCTTTGACATGGCTGTCAATGAA
ATCTTCTTTGACCGTTACCCTGACTCAATCTTAGAACATCAGATTCAAGTAAGACCATTCAACGCATTGAAGACT
AAGAATATGAGAAACCTGAATCCAGAAGACATTGACCAGCTCATCACCATCAGCGGCATGGTGATCAGGACATCC
CAGCTGATTCCCGAGATGCAGGAGGCCCTTCTCCAGTGCCAAGTGTGTGCCACACGACCCGGGTGGAGATGGAC
CGCGGCCGCATTGCAGAGCCAGTGTGTGCGGGCGCTGCCACACCACCCACAGCATGGCACTCATCCACAACCGC
TCCCTCTTCTCTGACAAGCAGATGATCAAGCTTCAGGAGTCTCCGGAAGACATGCCTGCAGGGCAGACACCACAC
ACAGTTATCCTGTTTGTCTACAATGATCTCGTTGACAAGGTCCAGCCTGGGGACAGAGTGAATGTTACAGGCATC
TATCGAGCTGTGCCTATTTCGAGTCAATCCAAGAGTGAGTAATGTGAAGTCTGTCTACAAAACCCACATTGATGTC
ATTCATTATCGGAAAACGGATGCAAAACGCTGCGATGGCCTTGATGAAGAAGCAGAACAGAACTTTTTTCAGAG
AAACGTGTGGAATTGCTTAAGGAACCTTCCAGGAAACCAGACATTTATGAGAGGCTTGCTTCAGCCTTGCGTCCA
AGCATTATGAACATGAAGATATAAAGAAGGGAATTTTGCTTCAGCTCTTTGGCGGGACAAGGAAGGATTTTAGT
CACACTGGAAGGGGCAAATTTCCGGGCTGAGATCAACATCTTGCTGTGTGGCGACCCCTGGTACCAGCAAGTCCCAG
CTGCTGCAGTACGTGTACAACCTCGTCCCCAGGGGCCAGTACACGCTCGGGAAGGGCTCCAGTGCAGTTGGCCTC
ACTGCGTACGTAATGAAAGACCCTGAGACAAGGCAGCTGGTCTGCAGACAGGTGCTCTTGCTCCTGAGTGACAAC
GGCATCTGCTGTATCGATGAGTTGACAAGATGAATGAAAGTACAAGATCGGTATTGCATGAAGTCATGGAACAG
CAGACTCTGTCCATTGCAAAAGGCTGGGATCATCTGTGAGTCAATGCGCGCACCTCTGTCTGCTGGCAGCAAAAT
CCCATTGAGTCTCAGTGGAATCCTAAAAAACAACCATTTGAAAACATCCAGCTGCCTCATACTTTATTATCAAGG
TTTGATTTGATCTTCCCTCTTGCTGGACCTCAGGACGAAGCCTATGACAGGCGTCTGGCTCACCACCTGGTCGCA
CTGTACTACCAGAGCGAGGAGCAGGCAGAGGAGGAGCTCCTGGACATGGCGGTGCTAAAGGACTACATTGCCTAC
GCGCACAGCACCATCATGCCGCGGCTAAGTGAGGAAGCCAGCCAGGCTCTCATCGAGGCTTATGTAGACATGAGG
AAGATTGGCAGTAGCCGGGGAATGGTTTCTGCATACCCTCGACAGCTAGAGTCATTAATCCGCTTAGCAGAAGCC
CATGCTAAAGTAAGATTGTCTAACAAAGTTGAAGCCATTGATGTGGAAGAGGCCAAACGCCTCCATCGGGAAGCT
CTGAAGCAGTCTGCAACTGATCCCCGACTGGCATCGTGACATATCTATTCTTACTACGGGGATGAGTGCCACC
TCTCGTAAACGGAAGAAGAATTAGCTGAAGCATTGAAAAAGCTTATTTTATCTAAGGGCAAACACCAGCTCTA
AAATACCAGCAACTTTTTGAAGATATTCCGGGACAATCTGACATAGCAATTACTAAAGATATGTTTGAAGAAGCA
CTGCGTGCCCTGGCAGATGATGATTTCTGACAGTGAAGGGAAGACCGTGCCTTGCTCTGAAGCCTTGTGAGC
AAGGAAGGCTCCCTGCATGTCCTGCTTGCTGCACGCCACATGGGTGTGGTCTGCATCTCAGTTGGCCGCCATCAG
TGTAATAGAGCTTAAAGTCATGGTTTGGCTGCATAAAAAATTTCTAACTTGGGTTCAATATTTGTAGTGAAGTA
TCTGTTTTTCAATTTTTTTTACGTTATAAATAAAAAATACTATGCTGGCCGGGCGCGGTGGCTCACACCTGTAATCCC
AGCACTTTGGGAGGCCAATGTGGGTGGATCATGAGGTCAGGAGTTCAAGACCAGCCTAGCCAAGATGGTGAAACC
CCGTCTCTAGTAAAGATAACAAAAAATTAGCTGGGCTTGATGGCATGCGCCTGTAATCCCAGCTACTCGGGAGGT
TGAGGCAGGAGAATCGCTTAAACCCAGGCGGCAGAGGTTGCAGTGAGCCAAGATCGCGCCACTGCACTCCAGCCT
CAGCAATAGAGTGAGACTGTCTC

WO 2004/030615

PCT/US2003/028547

2766/6881
FIGURE 2545

MSSPASTPSRRGSRGRATPAQTPRSEDARSSPSQRRRGEDSTSTGELQPMPTSPGVDLQSPAAQDVLFSSPPQM
HSSAIPLDFDVSSPLTYGTPSSRVEGTPRSGVRGTPVRQRPDLGSAQKGLQVDLQSDGAAAEDIVASEQSLGQKL
VIWGTDVNVAACKENFQRFIDPLAKEEENVGIDITEPLYMQRLGEINVIGEPPFLNVNCEHIKSFDKNLYRQ
LISYPQEVIPTFDMAVNEIFFDRYPDSILEHQIQVRPFNALKTKNMRNLNPEDIDQLITISGMVIRTSQLIPEMQ
EAFFQCQVCAHTTRVEMDRGRIAPSVCGRCHTTHSMALIHNRSLFSDKQMIKLQESPEDMPAGQTPHTVILFAH
NDLVDKVQPGDRVNVGTGIYRAVP IRVNPRVSNVKSVMYKTHIDVIHYRKTDKRLHGLDEEAEQKLFSEKRVELLK
ELSRKPDIIYERLASALAPSIYEHEDIKKGILLQLFGGTRKDFSHTRGKFRAEINILLCGDPGTSKSQLLYVYN
LVPRGQYTSKGSSAVGLTAYVMKDPETRLVLQTGALVLSDNIGCCIDEFDKMNESTRSVLHEVMEQQTLISIAK
AGIICQLNARTSVLAAANPIESQWNPKKTTIENIQLPHTLLSRFDLIFLLLDLPQDEAYDRRLAHLVALYYQSEE
QAEELLDMAVLKDYIAYAHSTIMPRLSEEASQALIEAYVDMRKIGSSRGMVSAYPRQLESILRLAEAHAKVRLS
NKVEAIDVEEAKRLHREALKQSATDPRTGIVDISILTTGMSATSRKRKEELAEALKKLIILSKGKTPALKYQQLFE
DIRGQSDIAITKDMFEEALRALADDDFLTVTGKTVRLI

WO 2004/030615

PCT/US2003/028547

2767/6881
FIGURE 2546

CGCGTCGGGCTGCAGGAGAAGATGGCGGTCTCCACAGGAGTTAAAGTTCTCGTAATTTTCGCTTGTTGGAAGAA
CTTGAAGAAGGACAAAAAGGAGTAGGCGACGGTACAGTTAGCTGGGGCCTTGAAGATGATGAAGATATGACACTT
ACAAGGTGGACAGGCATGATTATTGGGCCACCAAGGACAAATTATGAAAACAGAATATATAGCCTGAAAAGTAGAA
TGTGGACCTAAATACCCAGAAGCTCCTCCGTGAGTTAGATTGTAAACAAAAATTAATATGAACGGAATAAATAAT
TCCAGTGGGATGGTGGATGCCCGGAGCATACCAAGTGTAGCAAAATGGCAAAATTCATATAGCATTAAAGTTGTA
CTTCAAGAGCTAAGACGTCTAATGATGTCCAAAGAAAATATGAAGCTTCCACAGCCACCAGAAGGACAAACATAC
AACAATTAATTTTAGTGGATCTCAAACCTGTCTTAAATCAACAACCTTCTACTCATGTTAATGTCTTGATTAAAT
ATCACAATGCAAAATACACATTAAAGTAAAAGAAATCCAGCTGGTAAACATGACCTGGACATTTGTAAGAATATAT
TTAATATATGTACACCCATTATGTTTTTCAGGTAACAGGAGGAAAAATGCAGCACAATTTTTTTCTCTTGAAAGG
CACTGTCAATTTAAACATAAACCTGGAGTACTCGAAATAGAATTCAAGTTTACAAGATGAAAGCGTGTGGAGAAGT
GTCAGATGGCAGTGGAAAGCATGTGTGTTTCTAAAAAGTAAAAATCTCAAGAAAAACAGAAATGGCATGCTTTACCC
ATCTTACTTAGTGAAAGAGAGCTGCAGTTGAAATTGTTTAAAAAGTAGCAGGTACAATGAATATTGTCACAGATG
TGTTAATTTTTGAAGCAATGTGGGTGCTGACTACTAGTAGTATCAAAAAATATGTTTCAGGATTGTTTTGATACCTG
TATTTATAATAAAAAATGTTGGGGGGAGTTGATGAATTCCTGTTAAAAAGCTGTTCTTGTGTGTACATGTAACAG
ACATGGTAAATATTTGTTTACAGTCTTTGTTTAAACAAACCATGCATTTAAGTTTAAAGTGAAGTCAACAAAAAGGA
AATAGGTGTATGGATATGTGATTTTGAGATTAAAGTTAGTCTTAAATGTAAATAAAATGTGAAACGTGTCCTCA
GAGACTGTGCCATTTCTATTATGTTGATGTATATGTACAGTACCTTGCCAGGGAAGCAAAAATTGGAATTATTGT
AGCTTTTCATGTATACACACTTTTATTTACCCTATTTTGTGTACTTCTTGTGAATTATAATTTGCAGACTATTTT
AGAAAAGAAATTATCTAGTTTAATTTCTTCTTTGGACAAGGAGTCCTAGGTATTATATTTTGAGTTTGATTTTAC
CAGAAATAATAATATTAATAAAGATCTTGCATTCTGGCAGTTCTTTTAGGATTATAGGTTGCAAAATTATCCAAAT
ATATATCCCATTTTTTAAAGCATAAAAA

WO 2004/030615

PCT/US2003/028547

2768/6881
FIGURE 2547

MAVSTGVKVPRNFRLLLEELEEGQKGVGDGTVSWGLEDDEDMTLTRWTGMIIGPPRTNYENRIYSLKVECGPKYPE
APP SVRFVTKINMNGINNSSGMVDARSIPVLAKWQNSYSIKVVLQELRRLMMSKENMKLPQPPEGQTYNN

WO 2004/030615

PCT/US2003/028547

2769/6881
FIGURE 2548

AGATGGGCCATCAACTGAGAAAGACCTTGACGAAAAGAAGAAAGAACCTGCAATTACATCGCAGAACAGCCCTGA
GGCAAGAGAAGAAAGTACTTCCAGCGGCAATGTAAGCAACAGAAAGGATGAGACAAATGCTCGAGATACTTATGT
TTCATCCTTTTCCTCGGGCACCAAGCACCTTCTGATTCTGTGCGGTTGAAGTGTAGGGAGATGCTTGCTGCAGCTCT
TCGAACAGGGGATGACTACATTGCAATTGGAGCTGATGAGGAAGAATTAGGATCTCAAATTGAAGAAGATATATA
TCAAGAAATAAGGAATACAGACATGAAATACAAAAATAGAGTACGAAGTAGGATATCAAATCTTAAAGATGCAAA
AAATCCAAATTTAAGGAAAAATGTCCTCTGTGGGAATATTCTCTGACTTATTTGCTAGAATGACAGCAGAGGA
AATGGCTAGTGATGAGCTGAAAGAGATGCGGAAAAACTTGACCAAAGAAGCCATCAGAGAGCATCAGATGGCCAA
GACTGGTGGGACCCAGACTGACTTGTTTACATGTGGCAATGTAAAAAGAAGAATTGCACCTTACACACAGGTACA
AACCCGTAGTGCTGATGAACCAATGACAACATTTGTTGTCTGTAATGAATGTGGAAATCGATGGAAGTTCTGTTG
AGTTGGAAGAATTGGCAAAATATCTGGACCATTAAAGAAACGGATTTTGTAAGTAGCTTTAAACTAGGCCAAGCA
ACTAGTTTTCTGCAATCAAATTTTTAAAGCAACTTGGGTTAGACTTTGTTTTTGACCTAACATCCCTTCCTTA
AATGCCTTCTGTAGTTTCAGATCAGTAGGGAGACCATATAATAATTTTATGGTACCTGTTTTCAAAACATATTTTT
TCTGTTTTTATAAGTAAGTTGATATTAACTCTTGGAATATTTCTTCTTTCTTAAAGGAAAAATATACCTT
AACTTTTTTCTTTTACACTGTGAAACATACACAGTAGAAATCTGTTACTCTCTGTTATTAATACATAAAATGAA
AATACATTTTTTCCATATTGGCATGTAGCTACAAATATTAAAGGAGGAGAAAAAGGTAATATAATTTTAGGTTTA
CCAAATATGGTGTGTATTCAAATAACTTGACCAGCTTATCTAAATGTACATAATTTGAGGTAGCTTATGAA
TTTGATTTTAATTATTATGTTTACAAGCTTGGAATATTAGATATTATTTTGCATCTGTAACCTAACCGTGATCATC
ATTTCTTGTAATTTCTGTACATGTATATTACTTGTCTTAATAGATTTTTTGGAACAAGACTTTATTGAGATCA
GTTTGGTTTTCTGTTAATTTACCTGTTTGACTTTATAATGTGTTTTAGTTTTGCAGAAGAAGACTGTTGTAGTT
TAGAAGGCTTTTCATAAATCCCTCATAGGCAAGATGAAAACCTCCCACTATTTTTTCCCTCTTAGGAAGAC
ATACTGGAAGAAATGTTTAGCATCTTAGTGATAGCTATTGTAAACAGTTCATGACTAGATTTTGATTCTG
GAAATCTATACTGACCAAGGATTAATCTTAAGGATTGTATAATTCATTAAAGCTGTGGTCTTTCCATGTGGAGAC
TGATAGAAAATAATTTGTCCCAAGTCTTATTTGCTGACTTTTTCTGTCATGAGTGAGATTGTTGAACAACTGA
ATATATGGGCTATAGCAAGTAGCTTTACAGTACAGATCTTACAATTAAGTTTTGCTTTTGTTAAAGTGTGTACCA
TTTTTCTGTTTGGAGTAAGACAAAAATGTTTTGACATAGGTTCCCTAGGGTACACTTGCTCTAGCATACTTTA
AAGGCCACTGTTGCAAAGTCTACATTTTATGCTGAATCTGCATTCTGTCAGGCACCCGTAGAAAGACCTCAGTAC
ATGCTTTGCACTCTCCTTTGCTCCCTTTTTCCAATTTCTTATTGCATATCATTGTTGTAATACAGAAAGCAGC
ATTTTTAAATGTCCGTGTTAAGAATTGGCCCACTGGTACCAACTCACCTCTATTTTGTGAGTTTATAGTTGAAGA
TTTTGTTTTATTTCAAAAACAAAGTACATTTTGAAATAATGTTTCAGAATAAAATAATCTCACTTTTAAGTGAT
CCATTTTAAATTTGTAATTAATAAAGTTTTTTTTGTTGTTAAACAT

WO 2004/030615

PCT/US2003/028547

2770/6881
FIGURE 2549

MLAAALRTGDDYIAIGADEEELGSQIEEDIYQEIRNTDMKYKNRVRSRISNLKDAKNPNLRKNVLCGNIPDLFA
RMTAEEMASDELKEMRKNLTKEAIREHQMAKTGGTQTDLFTCGKCKKKNCTYTQVQTRSADEPMTTFVVCNECGN
RWKFC

WO 2004/030615

PCT/US2003/028547

2771/6881
FIGURE 2550

CGGCGGGCGAGGGGCGAGGGCAGGGCGGACCTGGACGCGCGGGCGCGCGGGAAGGTAGCGCGGGGCCGCGTTGG
CGCGCACGCGCCTGAGCGTGCGCCCGGTGGGGCCGGCCGGGACTCGCCGCTCGCACGCCCTTGGGGCCGCGGCCGG
GCGCCCGCTCTTCCCTTCCGCTTGCCTGTGAGCTGAGGCGGTGTATGTGCGGCAATAACATGTCAACCCCGCTGC
CCGCCATCGTGCCCGCCGCCCGGAAGGCCACCGCTGCGGTGATTTTCTGTCATGGATTGGGAGATACTGGGCACG
GATGGGCAGAAGCCTTTGCAGGTATCAGAAGTTCACATATCAAATATATCTGCCCCGATGCGCCTGTTAGGCCTG
TTACATTAAATATGAACGTGGCTATGCCCTCATGGTTTGATATTATTGGGCTTTCACCAGATTACAGGAGGATG
AATCTGGGATTAAACAGGCAGCAGAAAATATAAAAGCTTTGATTGATCAAGAAGTGAAGAATGGCATTTCCTTCTA
ACAGAATTATTTTGGGAGGGTTTTCTCAGGGAGGAGCTTTATCTTTATATACTGCCCTTACCACACAGCAGAAAC
TGGCAGGTGTCACGCACTCAGTTGCTGGCTTCCACTTCGGGCTTCCTTTCCACAGGGTCCCTATCGGTGGTGCTA
ATAGAGATATTTCTATTCTCCAGTGCCACGGGGATTGTGACCTTTGGTTCCCTGATGTTTGGTTCTCTTACGG
TGGA AAAACTAAAAACATTGGTGAATCCAGCCAATGTGACCTTTAAACCTATGAAGGTATGATGCACAGTTTCGT
GTCAACAGGAAATGATGGATGTCAAGCAATTCATTGATAAACTCCTACCTCCAATTGATTGACGTCACTAAGAGG
CCTTGTTGTAGAAGTACACCAGCATCATTGTAGTAGAGTGTAACCTTTTCCCATGCCCAGTCTTCAAATTTCTAA
TGTTTTGCAGTGTTAAATGTTTTGCAAATACATGCCAATAACACAGATCAAATAATATCTCCTCATGAGAAATT
TATGATCTTTTAAAGTTTCTATACATGTATTCTTATAAGACGACCCAGGATCTACTATATTAGAATAGATGAAGCA
GGTAGCTTCTTTTTTCTCAAATGTAATTCAGCAAAATAATACAGTACTGCCACCAGATTTTTTATTACATCATTT
GAAAATTAGCAGTATGCTTAATGAAAATTTGTTTCAGGTATAAAATGAGCAGTTAAGATATAAAACATTTATGCATG
CTGTGACTTAGTCTATGGATTTATTCCAAAATTGCTTAGTCACCATGCAGTGTCTGTATTTTTATATATGTGTTT
ATATATACATAATGATTATAATACATAATAAGAATGAGGTGGTATTACATTATTCCTAATAATAGGGATAATGCT
GTTTTATTGTCAAGAAAAAGTAAATCGTTCTCTCAATTAATGGCCCTTTTATTTTGGGACCAGGCTTTTATTTT
CCCTGATATTATTTCTATTTAATACTCTTTCTCTCAAGAAAAAAAAAAGTTTGTTTTTTCTTTATTGTCTT
CATAGCAGGCCAAGTATTGCCTCTCTGCAATAGACAGCTACTGTCAATACATGCTGTAATTTGACATTCTGGGTC
ACAGATATAAGGTATTTAAATCTATTTATGCTTTATAGAGAAACCAGACATTAACCTTCATGCACTACTTATT
TCGAATTACTGTACCTTATCCAAATTTACACCTAGCTATTAGGATCTTCAACCCAGGTAACAGGAATAATTCTGT
GGTTTCATTTTTCTGTAAACAACTGAAAGAATAATTAGATCATATTCTAGTATGTTCTGAAATATCTTTAAGACT
GATCTTAAAACTAACTTCTAAGATGATTTTCATCTTCTCATAGTATAGAGTTTACTTTGTACACGTTTGAAACCA
ACTACTGTAGAAGATGAGGAATCTATTGTAATTTTTTGTCTTATTTTTCATCTGCCAGTGGACTTATTTGAAATTT
TCACCTTAGTCAAATTATTTTTTGTATTAGTTTTTGATGCAGACATAAAAAATAGCAATCATTTTAAATTGTCAA
ATTTCCAGATTACTGGTAAAAATTATTTGAAAACAACTTATGGGTAATAAAGGCTAGTCAGAACCCATATACCAT
AAAGTGTAGTTACCATACAGATTAATATGTAGCAAAAAATGTATGCTTGATTTTCTCAACTGTGTTAATTTTTCT
GCTGTATTCCAGCTGACCAAAACAATATTAAGAATGCATCTTTATAAATGGGTGCTAATTGATAATGGAAATAAT
TTAGTAATGGACTATACAGGATGTTAATAATGAAGCCATATGTTTATGTCTGGATTTAAAAATTTTAAACAATCA
TTTACTATGTCATTTTTCTTTACCTTGAAGAACATAAACTGTTATTTCACTTCTACAAATCAGCAAGATATTATT
TATGGCAAGAAATATTCCATTGAAATATTGTGCTGTAACATGGGAAAGTGTAATGTTTTTCATGGTTTCTATCA
ATGTGAAATAAAATTTAATTCTGAAAAA

WO 2004/030615

PCT/US2003/028547

2772/6881
FIGURE 2551

MCGNNMSTPLPAIVPAARKATAAVIFLHGLGDTGHGWAEAFAGIRSSHIKYICPHAPVRPVTILNMNVAMP SWFDI
IGLSPDSQEDESIGKQAAENIKALIDQEVKNGIPSNRI ILGGFSQGGALSLYTALT TQQKLAGVTALSCWLPLRA
SFPQGP IGGANRDISILQCHGDCDPLVPLMFGSLTVEKCLKTLVNPANVTFKTYEGMMHSSCQEMMDVKQFIDKL
LPPID

WO 2004/030615

PCT/US2003/028547

2773/6881
FIGURE 2552

CTTTCTTTTTGAGGAAGACGCGGTCGTAAGGGCTGAGGATTTTGGTCCGCACGCTCCTGCTCCTGACTCACCGC
TGTTTCGCTCTCGCCGAGGAACAAGTCGGTCAGGAAGCCCGCGCGCAACAGCCATGGCTTTTAAGGATACCGGAAA
AACACCCGTGGAGCCGGAGGTGGCAATTCACCGAATTCGAATCACCCTAACAAGCCGCAACGTAAAAATCCTTGGA
AAAGGTGTGTGCTGACTTGATAAGAGGCGCAAAAGAAAAGAATCTCAAAGTGAAAGGACCAGTTCGAATGCCTAC
CAAGACTTTGAGAATCACTACAAGAAAACTCCTTGTGGTGAAGGTTCTAAGACGTGGGATCGTTTCCAGATGAG
AATTCACAAGCGACTCATTGACTTGACACAGTCCTTCTGAGATTGTTAAGCAGATTACTTCCATCAGTATTGAGCC
AGGAGTTGAGGTGGAAGTCACCATTGCAGATGCTTAAAGTCAACTATTTTAATAAAATTGATGACCAGTTGTTAAAA
AAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2774/6881
FIGURE 2553

MAFKDTGKTPVEPEVAIHRIRITLTSRNVKSLEKVCADLIRGAKEKNLKVKGpVRMPTKTLRITTRKTPCGEGSK
TWDRFQMRIHKRLIDLHSPSEIVKQITSISIEPGVEVEVTIADA

WO 2004/030615

PCT/US2003/028547

2775/6881
FIGURE 2554

ATGATGAAGGGAACGTCATCATTGGAAAGCATTGCAATAAGACGTACACGTTATGCCACCACTGTGGCTCTAAG
GCCTACCACCTTCAGAAGTCGACCTATGGCAAATGTGGCTACACTGCCAAGCGCAAGAGAAAGTATAACTGGAGT
ACCAAGGCTAAAAGACGAAATACCACCAGAACTGGTCAAATGAGGCACCTAAAAATTGTATACCATAGATTCAGG
CATGGATTCCGTGAAGGAACAACACCTAAACCCAAGAGGGCAGCTGTTGCAGCATCCAGTTCATCTTAA

WO 2004/030615

PCT/US2003/028547

2776/6881
FIGURE 2555

MMKGTSSFGKHCNKTYTLCHHCGSKAYHLQKSTYGKCGYTAKRKRKYNWSTKAKRRNTTRTGQMRHLKIVYHREFR
HGFREGTTPKPKRAAVAASSSS

WO 2004/030615

PCT/US2003/028547

2777/6881
FIGURE 2556

CCCTGGTGTGATTCCATCCTGTGTGGCTGTTCTCTGGAGCAGCATTTCGTTTATCTTCGTCCGCCTTCTCTCCTAC
CTAAGTGCGTGCTGCCTCCCGATGGAAGATCTGATGGACGTGGACATGAGCTCCCTGAGGCCCCAGAACTATCTT
TTTGGTTGTGAACTAAAGGCTGACAAAGATTGTCACTTTAAGGTGGATAATGATGAAAATGAGCGCCAGTTGTCT
TTAAGAACGGTCAGTTTAGGGGCTGGTGCAAAGGATGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACGAA
GGCAGCCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTTGAA
ACAACACCACCAGTAGTCTTAAGGTTGAAGTGTGGTTCAGGGCCAGTGTCATATTAGTGGACAGCACTTAGTAGCT
GTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGATGATGAAGATGATGATGATGATGATTTTAAATGAT
GAGGAAGCTGAAGAAAAAGTGCCAGTGAAGCAATCTATACAAGATACTCCAGCCAAAAATGCACAAAAGTCAAAT
CAGAAATGGAAAAGACTCAAAACCATCAACACCAAGATCAAAAGGACAAGAATCTTTCAAAAAACAGGAAAAAAC
TCCTAAACACCAAAAGGACCTAGTTCTGTAAAAGACAT

WO 2004/030615

PCT/US2003/028547

2778/6881
FIGURE 2557

GATTCCATCCTGTGTGGCTGTTCTCTGGAGCAGCATTTCGTTTATCTTCGTCCGCCCTTCTCTCCTACCTAAGTGCG
TGCTGCCTCCCGATGGAAGATCTGATGGACGTGGACATGAGCTCCCTGAGGCCCCAGAACTATCTTTTTTGGTTGT
GAACTAAAGGCTGACAAAGATTGTCACTTTAAAGGTGGATAATGATGAAAAATGAGCGCCAGTTGTCTTTAAGAACG
GTCAGTTTATAGGGCTGGTGCAAAGGATGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACGAAGGCAGCCCA
ATTAAAGTAACACTGGCAACTTTGAAAAATGCTGTACAGCCAACGGTTTCCCTTGGGGGGCTTTGAAACAACACCA
CCAGTAGTCTTAAGGTTGAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTAGCTGTGGAGGAA
GATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGTGAAACTCTTAAGTATATCTGGAAAGCGATCTGCCCTCGGA
GGTAGTAGCAAGCTTCCACAGAAAAAGTAAAACTTGCTGCTGATGAAGATGATGATGATGAAGAAGATGAT
GATGATGAAGATGATGATGATGATTTTAAATGATGAGGAAGCTGAAGAAAAAGTGCCAGTGAAGCAATCTATACAA
GATACTCCAGCCAAAAATGCACAAAAGTCAAAATCAGAATGGAAAAAGACTCAAAACCATCAACACCAAGATCAAAA
GGACAAGAATCTTTCAAAAAACAGGAAAAAACTCCTAAAAACACCAAAAGGACCTAGTTCTGTAAAAGACATTAA
AGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTCTCTTCCCAAAGTGGAAGCCAAGTTCATCAATTACGTGAA
GAATTGCTTCCGGATGACTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAGTCTCTTTAAGAAAATAG
TTTAAACAATTTGTTAAAAATTTTCCGTCTTATTTTCAATTTCTGTAAACAGTTGATATCTGGCTGTCCTTTTTATAA
TGCAGAGTGAGAACTTTCCTACCGTGTTTGATAAATGTTGTCCAGGTTCTATTGCCAAGAATGTGTTGTCCAAA
ATGCCTGTTTAGTTTTTAAAGATGGAACCTCCACCCCTTGCTTGGTTTTAAGTATGTATGGAATGTTATGATAGGA
CACAGTAGTAGCGGTGGTCAGACATGGAAATCGTGGGGAGACAAAAATATACCTGTGAAATAAACTCAGTATTT
TAAT

PCT/US2003/028547

FIGURE 2558

GGAGCAGCATTTCGTTTATCTTCGTCGCGCTTCTCTCCTACCTAAGTGCCTGCTGCCCTCCCGATGGAAGATCTGAT
GGACGTGGACATGAGCTCCCTGAGGCCCCAGAACTATCTTTTTGGTGTGAACTAAAGGCTGACAAAGATTGTCA
CTTTAAGGTGGATAATGATGAAAATGAGCGCCAGTTGTCTTTAAGAACGGTCAGTTTAGGGGCTGGTGCAAAGGA
TGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACGAAGGCAGCCCAATTAAAGTAACACTGGCAACTTTGAA
AATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTTGAAACAACACCACCAGTAGTCTTAAGGTTGAAGTGTGG
/TTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGA
GGAGGATGTGAACTCTTAAGTATATCTGGAAAGCGATCTGCCCTCGGAGGTAGTAGCAAGCTTCCACAGAAAAA
AGTAAACTTGCTGCTGATGAAGATGATGATGATGATGAAGAAGATGATGATGATGAAGATGATGATGATGATT
TAATGATGAGGAAGCTGAAGAAAAAGTGCCAGTGAAGAAAGGACAAGAATCTTTCAAAAAACAGGAAAAAACTC
CTAAACACCAAAGGACCTAGTTCTGTAAAAGACATTAAAGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTT
CTCTTCCCAAAGTGGAAGCCAAGTTCATCAATTACGTGAAGAATTGCTTCCGGATGACTGACCAAGAGGCTATT
AAGATCTCTGGCAGTGGAGGAAGTCTCTTTAAGAAAATAGTTTAAACAATTTGTTAAAAATTTTCCGCTCTTATTT
CATTTCTGTAACAGTTGATACTGGCTGTCTTTTTATAATGCAGAGTGAGAACTTTCCCTACCGTGTGTTGATAA
ATGTTGTCCAGGTTCTATTGCCAAGAATGTGTTGTCCAAAATGCCTGTTTAGTTTTTAAAGATGGAAGTCCACCC
TTTGCTTG

WO 2004/030615

PCT/US2003/028547

2780/6881
FIGURE 2559

GCTCCTTCTAGGATCTCCGCCTGGTTTCGGCCCCGCCTGCCTCCACTCCTGCCTCCACCATGTCCATCAGGGTGATC
CAGAAGTCCTACAAGGTGTCCACCTCTGGCCCCCGGGCCTTCAGCAGCCGCTCCTACACGAGTGGGCCCCGGTGCC
CACATCAGCTCCTCGAGCTTCTCCTGAGTGGGCAGCAGCAGCTTTCGGGGTGGCCTGGGAGGCGGGCTATAGTGGG
GCCAGCGGCATGGGAGGCATCACCGCAGTCATGGTCAACCAGAGCCTACTGAGCCCCCTTGTCTGGAGGTGGAC
CCCAACATCCAGGCTGTGTGCACCCAGGAGAAGGAGCAGATCAAGACCCCTCAACAACAAGTTTGCCTCCTTCACA
GACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGATG
GCTCGGAGCAACATGGACAACATGTTTCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAG
GAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGAGGCTGGTGGAGGACTTCAAGAACAAGTATGAGGAT
GAGATCAATAAGCATACAGAGATGGAGAATGAATTTGTCTCATCAAGAAGGATGTGGATGAAGCTTACATGAAC
AAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACTGACGAGATCAACTTCCTCAGGCAGCTGTACGAAAAGGAG
ATCCGGGAGCTGCAGTCCCAGATCTCGGACACATCTGTGGTGCTGTCCATGGACAACAGCCGCTCCCTGGACATG
GACAGCATCATTGCTGAGGTCAAGGCACAGTACGAGGATATTGCCAACCAAGACGGGGCTGAGGCTGAGAGCATG
TACCAGATCAAGTATGAGGAGCTGCAGAGTCTGGCTGGGAAGCACGGGGATGACCTGTGGCGCACAAAGACTGAG
ATCTCTGAGATGAACTGGAACATCAGCCAGCTCCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAGGGCTTCCCTG
GAGGCCGCCATTGCAGATGCCGAGCAGCGTGGAGAGCTGGCCATTAAGGATGCCAACGCCAAGTTGTCCGAGCTG
GAGGCTGCCCTGCAGCGGGCCAAGCAGGACATGGCACGGCAGCTGCGTGAGTACCAGGAGCTGATGAACGTCAAG
CTGGCCCTGGACATCGAGATCGCCACCTACAGGAAGCTGCTGGAGGGCAAAGAGAGCCGGCTGAAGTCTGGGATG
CAGAACATGAGTATTCATACGAAGACCACCAGCGGCTATGCAGGTGGTCTGAGCTCGGCCTATGGGGGCCTCACA
AGCCCCGGCCTCAGCTACGGCCTGGGCTCCAGCTTTGGCTCTGGCGCAGGCTCCAGCTCCCTCAGCCGCACCAAGT
TCCTCCAGGGCCGTGGTTGTGAAGAAGATCGAGACATGTGATGGGAAGCTGGTGTCCGAGTCTCTGACATCCTG
CCCAAGTGAACAGCTGTGGCAGCCCCCTCCAGCCTACCCCTCCTGCGCTGCCCCAGAGCCTGAGAAGGAGGGCCAC
TATTCAGGGTAGCACTGGGAACAGGAGACCCACCTGAGGCTCAGCCCTAGCCCTCAGCCACCTGGGGAGTTTAC
TACCTGGGGACCCCCCTTGCCCATGCCTCCAGCTACAAAACAATTCAATTGCTTTTTTTTGGTCCAAAATAAAAC
CTCAGCTAGCTCTGCCAA

WO 2004/030615

PCT/US2003/028547

2781/6881
FIGURE 2560

GAGTGGGCAGCAGCAGCTTTTCGGGGTGGCCTGGGAGGCGGCTATAGTGGGGCCAGCGGCATGGGAGGCATCACCG
CAGTCATGGTCAACCAGAGCCTACTGAGCCCCCTTGTCTGGAGGTGGACCCCAACATCCAGGCTGTGTGCACCC
AGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCACAGACAAGGTACGGTTCCTGGAGCAGC
AGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGATGGCTCGGAGCAACATGGACAACATGT
TCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAGGAGAAGCTGAAGCTGGAGGCGGAGC
TTGGCAACATGCAGAGGCTGGTGGAGTCTGGGATGCAGAACATGAGTATTCATACGAAGACCACCAGCGGCTATG
CAGGTGGTCTGAGCTCGGCCTATGGGGGCCTCACAAGCCCCGGCCTCAGCTACGGCCTGGGCTCCAGCTTTGGCT
CTGGCGCAGGCTCCAGCTCCCTCAGCCGCACCAGTTCCTCCAGGGCCGTGGTTGTGAAGAAGATCGAGACATGTG
ATGGGAAGCTGGTGTCCGAGTCCTCTGACATCCTGCCCAAGTGAACAGCTG

WO 2004/030615

PCT/US2003/028547

2782/6881
FIGURE 2561

CTGGGAGGCGGCTATAGTGGGGCCAGCGGCATGGGAGGCATCACCGCAGTCATGGTCAACCAGAGCCTACTGAGC
CCCCTTGTCCTGGAGGTGGACCCCAACATCCAGGCTGTGTGCACCCAGGAGAAGGAGCAGATCAAGACCCCTCAAC
AACAAGTTTGCCTCCTTCACAGACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGC
CTCCTGCAGCAGCAGAAGATGGCTCGGAGCAACATGGACAACATGTTTCGAGAGCTACATCAACAACCTTAGGCGG
CAGCTGGAGACTCTGGGCCAGGAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGAGGCTGGTGGAGGAC
TTCAAGAACAAGTATGAGGATGAGATCAATAAGCATACAGAGATGGAGAATGAATTTGTCCTCATCAAGAAGGAT
GTGGATGAAGCTTACATGAACAAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACTGACGAGATCAACTTCCTC
AGGCAGCTGTACGAAAAGGAGATCCGGGAGCTGCAGTCCCAGATCTCGGACACATCATTGCTGAGGTCAAGGCAC
AGTACGAGGATATTGCCAACCAAGACGGGCTGAGGCTGAGAGCATGTACCAGATCAAGTATGAGGAGCTGCAGA
GTCTGGCTGGGAAGCACGGGGATGACCTGTGGCGCACAAAGACTGAGATCTCTGAGATGAACTGGAACATCAGCC
AGCTCCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAGGGCTTCCCTGGAGGCCGCCATTGCAGATGCCGAGCAGC
GTGGAGAGCTGGCCATTAAGGATGCCAACGCCAAGTTGTCCGAGCTGGAGGCTGCCCTGCAGCGGGCCAAGCAGG
ACATGGCACGGCAGCTGCGTGAG

WO 2004/030615

PCT/US2003/028547

2783/6881
FIGURE 2562

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTTCGCTGCACTAACTGTGCCCCGATGCATGCCCAAGGACAAGGCCATTAAGAAATTCGTCATTTCGAAAC
ATAGTGGAGGCCGCGCAGCAGTCAGGGACATTTCTGAAGCGAGCATCTTTGATGCCTATTTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCTGCAAG
GACCGAACACCCCCACCCCAATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTAAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATTAAATGGAACTGTACTTA

WO 2004/030615

PCT/US2003/028547

2784/6881
FIGURE 2563

AGGCGGGGGCGGTGCCATGACGCGCCTCGGGGGCGGTCTCGGGCGCGCACCGCTCTCTTACACTCGGGCCTCAG
AAGTCCGTGCCAGTGACCGGAGGCGGCGGGCGGCGAGCGGTTCCCTTGTGGGCTAGAAGAATCCTGCAAAAATGTCT
CTCTATCCATCTCTCGAAGACTTGAAGGTAGACAAAGTAATTCAGGCTCAAACCTGCTTTTTCTGCAAAACCTGCC
AATCCAGCAATTTTGTGAGAAGCTTCTGCTCCTATCCCTCACGATGGAAATCTCTATCCAGACTGTATCCAGAG
CTCTCTCAATACATGGGGCTGAGTTTAAATGAAGAAGAAATACGTGCAAAATGTGGCCGTGGTTTCTGGTGCACCA
CTTCAGGGGCGAGTTGGTAGCAAGACCTTCCAGTATAAACTATATGGTGGCTCCTGTAAGTGGTAATGATGTTGGA
ATTCGTAGAGCAGAAATTAAGCAAGGGATTTCGTGAAGTCATTTTGTGTAAGGATCAAGATGGAAAAATTGGACTC
AGGCTTAAATCAATAGATAATGGTATATTTGTTTCAGCTAGTCCAGGCTAATTCTCCAGCCTCATTGGTTGGTCTG
AGATTTGGGGACCAAGTACTTCAGATCAATGGTGAAAACCTGTGCAGGATGGAGCTCTGATAAAGCGCACAAGGTG
CTCAAACAGGCTTTTGGAGAGAAGATTACCATGACCATTTCGTGACAGGCCCTTTGAACGGACGATTACCATGCAT
AAGGATAGCACTGGACATGTTGGTTTTATCTTTAAAAATGGAAAAATAACATCCATAGTGAAAGATAGCTCTGCA
GCCAGAAATGGTCTTCTCACGGAACATAACATCTGTGAAATCAATGGACAGAATGTCATTGGATTGAAGGACTCT
CAAATTGCAGACATACTGTCAACATCTGGGACTGTAGTTACTATTACAATCATGCCTGCTTTTATCTTTGAACAT
ATTATTAAGCGGATGGCACCAAGCATTATGAAAAGCCTAATGGACCACACCATTCTGAGGTTTAAAAATTCACGG
CACCATGGAAATGTAGCTGAACGTCTCCAGTTTCTTCTTTGGCAACTTCTGTATTATGCACGTGAAGCCTTCCC
GGAGCCAGCGAGCATATGCTGCATGAGGACCTTCTATCTTACATTATGGCTGGGAATCTTACTCTTTCATCTGA
TACCTTGTTTCAGATTTCAAAATAGTTGTAGCCTTATCCTGGTTTTACAGATGTGAAACTTTCAAGAGATTTACTG
ACTTTCCTAGAAATAGTTTCTCTACTGGAAACCTGATGCTTTTATAAGCCATTGTGATTAGGATGACTGTTACAGG
CTTAGCTTTGTGTGAAAACCACTCACCTTCTCCTAGGTAATGAGTAGTGCTGTTTCATATTACTTTAGTTCTATA
GCATACTTGCATCTTTAACATGCTATCATAGTACATTTAGAATGATTGCCTTTGATTTTTTTTTTAAATCTGTG
TGTGTGTGTGTAATAATGCAATTAAGAACACTGGTTTCAATCCATGTAAGCATTAAACAGTGTATGTAGGTTTCA
AGAGATTGTGATGATTCTTAAATTTTAACTACCTTCACTTAATATGCTTGAAGTGTGCGCTTAACTATGTTAAGC
ATCTAGACTAAAAGCCAAAATATAATTATTGCTGCCTTTCTAAAAACCCAAAATGTAGTTCTCTATTAACCTGAA
ATGTACACTAGCCCAGAACAGTTTAATGGTACTTACTGAGCTATAGCATAGCTGCTTAGTTGTTTTTGGAGATTTT
TTAGTCAACACATAATGGAAACTTCTTTCTTCTAAAAGTTGCCAGTGCCACTTTTAAAGAGTGAATCACTATATG
TGATGTAAAAAGTTATTACACTAAACAGGATAAACTTTTGAAGTCCCTTTTGTTCATTTGTGGATTAAGTGGTATA
ATACTTAATTTTGGCATTGACTCTTAAGATTATGTAACTAGCTACTTTGGGATGGTCTTAGAATATTTTTCTG
ATAACTTGTTTCTTTTCTGACTCCTCCTTGCAACAAAATGATAGTTGACACTTTATCCTGATTTTTTTCTTCT
TTTTGGTTTATGTCTATTCTAATTAAATATGTATAAATAAAGTTACATTTTAGTCTGTC

PCT/US2003/028547

TGCTGCCTACAGCGTCTGCTCCACCCCTGCTGCCCGCTGGAGCCCTAGTGGCTCCCTCGCTTGGCAACAACACAA
GTCTCATGGCCGCAGCAGCTGCAGCTGCAGCAGTGGCAGCAGCAGGCGGACCTCCAGTCCCTCACTGCCCAGACCA
ACCCCTTCCTCAGCCTGTCTGGGAGCAGACGGCAGTGGCGGTGGCCCCAAAGGAGGGACCGCTGACAAAGGAGCCT
CAGCCAACCAGGAAAAAGGCTAAATCCACCCCTTACCCCTCCTGACCCCCCAAGTGGAGGGGAACAGATCCTGGCCT
GAGGGGTCTTAGCCTGGAGCAGGCGCCTGCGCCACAGCCCTGGAGAGCCTTGACCCAGAGCCTGTGCTGAGGTCC
AGGGAGTGTGGAGAGCTCCTGGTGTCAAGGACTGAGACTGAGAGGGGAGCCCCCTCCATCTGGCCCCCTTCCCTT
TCTGTACTGTCCGCTTTGTGAGGCTCAGAGGAAGGACAGTCTGCAAGCCACCTAGGAGGTCCATCCCCAGCAAA
TGTTTTGGAGGTCCCCCAGAGAGCACAGTGGGCCATGGAAGAAGTAGGGGGTTGGTTGGACCTGTCACATGAAA
TGGATCAGCACTTGAATGGGAGAAGTGGAGGGAGAGGCCCTGGGCCTGTCCCTGCGGGGAAATCTTTTATGGAA
GAAGGGCTGGACCCACTTTACCTGCAGTTTCTTCCAGCTCAGGCAGATGGCAGAAGGGACCCCTTGGACTTTTT
CTCGCCATCCCTCCCCCAGCGCAGGGGCACAAGCTGAGCTTGTAAAAGCCACAGATGTTGGGGGCTGGAGAAG
GGGCAGGAGAGCATCACACTCAGCCCCAGCCTCCTCAACCTCTTGGGGCCCTGTGATGGGGAGGAGACGGCAGGT
GCGGGGAGGCTCCGGCCTTCCTTGGTGCCCCGCCCTTTGTTTGCACATTATTGGACTTAGGAGTGCCGAGGGTGGGG
AGATGGAGCTGCCTGACTCAGTGTGTGAGTGTGTGTGCGTGATGTGTGTGTGTGTGTGTGTGTATGTGTCTGTC
TGCTGTCTCTCTCCTCCTGGACCCAGGGCAGCCAAGGGCAGGGATAGGTGCAGTGGTCAGATGAAGCAGTGCCA
GAGAGGGGACCTCCCAGCTCTTATTTGCACCCCTCCCCACCTCACCAACTTTGGTCCCTCTCTGGGGGCATGAATG
GTTAACAAACACCAGAGCAGTACTCCAATATTGGAGAGTCACTGGGGGCACAGGGCTTTGAATCAGGGTAGTATC
CTGCCCTTCCCTCCCCTGACCCACATGGTCTCAGGGCCCCCTTAGGGCCCCCTACCCCACTGATAGCTTCTCTCT
TCTCTGGCACAAAGGGGAGCCCCAGGGCTTGGGGGAGGGCGTAAGGTGGGGGGAAATGCCACAGCTTTTAGCAAAA
GCCCTCCCTCCCAGAATTAGCCAGCTTGCCTCCTGCACCCACCCCCACCAACCAGGGGAGCCACTAAGCTGACTA
ACAACGTGCCCCTCACCCACCAGCTATTTCCCCAGTGTAGAGTGGGCAATTCTCACCTTCAAAGAGTCCCCACCT
GCCCAGGCCTTTGGCACAGAGGCTGAGTGGACAGTCAGGAGAGAGGGCAGAGGCAAGGCAGGCGATGTCCCTG
TTTCAGTTGCACCTGGGGTTGGAGCCAGGGTAGGGGTTTCCAGCTTCCCGAGGCTCCGGCCTTGTGAGTCTCTT
GCATGTGTGGATTTTTCTGTGTGTTTCTGTTTGGGTTTTTGTGTTGGGTATTTTTTTTTTTTAAATAAGAAA
AGAAGATGTGTATATTTTTGGCAACGAC

WO 2004/030615

PCT/US2003/028547

2786/6881
FIGURE 2565

CAAGAGTCTAGGTAAGAGTTTGTTCCTGCGGTGCGGAGGGTCAAGGCCACACCCGGAAACCTAGCGAGGTAAAG
TTGCGTCTTGTTGTAGAGACGACAACCTTCTCCGCTTCCTCGGCGATGCGCGCGTCCGGGAGCGGTATGGCCCAG
AAAACCTGGGAACCTGGCCAACAACATGCAGGAAGCTCAGAGTATCGATGAAATCTACAAATACGACAAGAAACAG
CAGCAAGAAATCCTGGCGGCGAACCTTGGGACTAAGGATCACCATTACTTTAAGTACTGCAAAATCTCAGCATTG
GCTCTTCTGAAGATGGTGATGCATGCCAGATCGGGAGGCAATTGGAAGTGATGGGTCTGATGCTAGGAAAGGTG
GATGGTGAAACCATGATCATTATGGACAGTTTTGCTTTGCCTGTGGAGGGCACTGAAACCCGAGTAAATGCTCAG
GCTGCTGCATATGAATACATGGCTGCATACATAGAAAATGCAAAACAGGTTGGCCGCCCTTGAAAATGCAATCGGG
TGGTATCATAGCCACCCCTGGCTATGGCTGCTGGCTTTCTGGGATTGATGTTAGTACTCAGATGCTCAATCAGCAG
TTCCAGGAACCATTTGTAGCAGTGGTGATTGATCCAACAAGAACAATATCCGCAGGGAAAGTGAATCTTGGCGCC
TTTAGGACATACCCAAAGGGCTACAAACCTCCTGATGAAGGACCTTCTGAGTACCAGACTATTCCACTTAATAAA
ATAGAAGATTTTGGTGACACTGCAAACAATATTATGCCTTAGAAGTCTCATATTTCAAATCCTCTTTGGATCGC
AAATTGCTTGAGCTGTTGTGGAATAAATACTGGGTGAATACGTTGAGTTCTTCTAGCTTGCTTACTAATGCAGAC
TATACCACTGGTCAGGTCTTTGATTTGTCTGAAAAGTTAGAGCAGTCAGAAGCCCAGCTGGGACGAGGGAGTTTC
ATGTTGGGTTTAGAAACGCATGACCGAAAATCAGAAGACAACTTGCCAAAGCTACAAGAGACAGCTGTAAAACT
ACCATAGAAGCTATCCATGGATTGATGTCTCAGGTTATTAAGGATAAACTGTTTAATCAAATTAACATCTCTTAA
ACAGTCTCTGAGAAGTACTTTACCTGAAAGACAGTATGAGAAAAATATTCAAGTAACACTTTAAAACAGTTACC
CAAAATCTGATTAGAGTATAAGGTGCTCTGAAGTGTCTTAAATATTAATATCCTGTAATAAAGCTCTTTAAAT
GA

WO 2004/030615

PCT/US2003/028547

2787/6881
FIGURE 2566

MAASGSGMAQKTWELANNMQEAQSIDEIYKYDKKQQQEILAA NLGTDH HYFKYCKISALALLKMVMHARSGGNL
EVMGLMLGKVDGETMIIMDSFALPVEGTETRVNAQAAAYEYMAAYIENAKQVGRLENAIGWYHSHPGYGCWLSGI
DVSTQMLNQFQEPFVAVVIDPTRTISAGKVN LGAFRTYPKGYKPPDEGPSEYQTIPLNKIEDFGVHCKQYYALE
VSYFKSSLD RKLLELLWNKYWVNTLSSSSLLTNADYTTGQVFDLSEKLEQSEAQLGRGSFMLGLETHDRKSEDKL
AKATRDSCKTTIEAIHGLMSQVIKDKLFNQINIS

WO 2004/030615

PCT/US2003/028547

2788/6881
FIGURE 2567

GGCACGAGGGGGAGGCGGGCGGCGAGTCGGTGAGCAGCTGGGAAGAGCAGAACCGGGGCGGAGCACCTGCAGGCGC
GGGCGGGCGGGCCCCACCAATGGCGATTTCGCAAGAAAAGCACCAGAGCCCCCAGTGCTGAGCCACGAATTCGTCCCT
GCAGAATCACGCGGACATCGTCTCCTGTGTGGCGATGGTCTTCCTGCTGGGGCTCATGTTTGAGATAACGGCAAA
AGCTTCTATCATTTTTTGTACTCTTCAGTACAATGTACCCTCCCAGCAACAGAAGAACAAGCTACTGAATCAGT
GTCCCTTTATTACTATGGCATCAAAGATTTGGCTACTGTTTTCTTCTACATGCTAGTGCGGATAATTATTTCATGC
CGTAATTCAAGAGTATATGTTGGATAAAATTAACAGGCGAATGCACTTCTCCAAAACAAAACACAGCAAGTTTAA
TGAATCTGGTCAGCTTAGTGCGTTCTACCTTTTTGCCTGTGTTTGGGGCACATTCTCTCATCTCTGAAAACTA
CATCTCAGACCCAACTATCTTATGGAGGGCTTATCCCATAACTGATGACATTTCAAATGAAGTTTTCTACAT
ATCACAGCTGGCTTACTGGCTTCATGCTTTTCTGAACCTCTACTTCCAGAAAACCAAAAAGAAGATATTCCTCG
TCAGCTTGTCTACATTGGTCTTTACCTCTTCCACATTGCTGGAGCTTACCTTTTGAACCTTGAATCATCTAGGACT
TGTTCTTCTGGTGCTACATTATTTTGTGAAATTTCTTTTCCACATTTCCCGCCTGTTTTATTTAGCAATGAAAA
GTATCAGAAAGGATTTTCTCTGTGGGCAGTTCTTTTTGTTTTGGGAAGACTTCTGACTTTAATCTTTCAGTACT
GACTGTTGGTTTTGGCCTTGCAAGAGCAGAAAATCAGAAGCTGGATTTCACTACTGGAACTTCAATGTGTTAGC
TGTTAGAATCGCTGTTCTGGCATCCATTTGCGTTACTCAGGCATTTATGATGTGGAAGTTCATTAATTTTCAGCT
TCGAAGGTGGAGGGAACATTCTGCTTTTTCAGGCACCAGCTGTGAAGAAGAAACCAACAGTAACTAAAGGCAGATC
TTCTAAAAAAGGAACAGAAAATGGTGTGAATGGAACATTAACCTCAAATGTAGCAGACTCTCCCCGGAATAAAAA
AGAGAAATCTTCAATAATGAATTATAAACTAATTGATTAATGTCCCCAAAGAAATCTGCTTTTCTACTATATCTTTC
AGCATTAGAGATTTTTCTGTTCTTGAAAATACAGTCTGTGCTCTTTGATTTTTGCTATTGTACGGTTTCATGCAT
TTTTTTAAAGGGCATTTGAGGGGAGGATTATTGCTATGAATGAAAAAATATTTTAGCTTAGACTAAGCTACCTG
CCTTCAAATAGTTTGGGACCACCACCATATTTTATTTTGTTTTTATTTTTGAACATTTTCTAATGATTTGGA
GAGAAAATATTTACAAAAATTCACATATCAGTGATACAATTTCTTGCTGTCACCAATTTTTTATAATAGCAGA
GTGGCCTGTTCTAAGAAGGCCATATTTTTTAAGTTATCTTTCAGGGTAACATGGAATACTATAAAGTTGGATGT
CAAACCTTAATATGTTTTAGTGTTCTCTAATTTTTTGAATTTTTGTAGACTTTACACCTGGAAAAAAGATTT
GTAAATCACCGGAACAATTGTGTGCTTTATTTTATAGGTAGTGGTTATTAGTATTACATCCCCATTTTAAAAAC
AAAAACATAATAATGGTTACAACACGTGGAGTTTTACTAACATACATATTAAATCAAAGTATATTCTTAAAAGTA
CTTGTAAGTAAAATCTTTCTTGTCATTTTCAATACTTGTAACCTGGAAATCAGAAAATATTTACTATGAACAG
GAAAATCTGACATATAGCCCTTTTTGATATGTTTATTAATAATGATTCTTAATGGGGCTCATAATAAGTTTAATA
TGCACAGCATCTTAGAAAAGTTTAACTGCAAACACTTTTAAAACATAATGCCTACTTGATTTATCTATAAAAA
AGACTGACAGGTAATTATATTTGGAAAACATTTAATGCACTAACTTTAAAGAAATTGAAAATTCAGGTGGATAAA
TAGTCTTACAAAAGACAATGTGCTTTATGTTATACCTATAGCTTTGGTCCCATCTTTAATTGAGAAAACATTTATC
TGTATAAAACATATTTTTGGATAAATATATATATATATATTTGTATCGCTACAGAAAGGCTCTAAAAAGCATTG
AGGAAAATATTTGGTTCCCTTTTCTATAATCATCCTTTAAGATTCTTATAGCTACATTTGGTTTATTTCATCATAT
TTACAGTATATATATTGTTCTTTTTCAGTGTTTCACATCTTGTTCCTCCATTTCTCACTTGTGTCCACAGCTGTTTGT
GCCATTTTTAGTGTAAGGTTGCAGACCTATTAGATCTGCAGTTTAAAGTTGCCATGCTGCTAGGAAATTGTCCTT
TTTCTTTCTAGCTGTTAACCTACTTCTGGAAAAAGTAGTAGCTCTCTGTAGCATTATGGAGTTTCAGTGGAACC
AAATTTTTGCCATTAAAACTGGCATTATACTGAACATATACATTGAGAAATCAATCAAAAATAAAAAATTTTTACTT
TCACAAAAA

WO 2004/030615

PCT/US2003/028547

2789/6881
FIGURE 2568

MAIRKKSTKSPPVLSHEFVLQNHADIVSCVAMVFLGLMFEITAKASIIFVTLQYNVTLPATEEQATESVSLYYY
GIKDLATVFFYMLVAIIHAVIQEYMLDKINRRMHFSKTKHSKFNESGQLSAFYLFACVWGTFILISENYISDPT
ILWRAYPHNLMTFQMKFFYISQLAYWLHAFPELYFQKTKKEDIPRQLVYIGLYLFHIAGAYLLNLNHLGLVLLVL
HYFVEFLFHISRLFYFSNEKYQKGFSLWAVLFLVLRLLTLILSVLTVGFGLARAENQKLDFTGNNFNLAVRIAV
LASICVTQAFMMWKFINFQLRRWREHSAPAPAVKKKPTVTKGRSSKKGTENGVNGLTNSNVADSPRNKKEKSS

WO 2004/030615

PCT/US2003/028547

2790/6881
FIGURE 2569

CCTCTTTTTCCGGCTGGAACCATGGAGGGTGTAGAAGAGAAGAAGAAGGAGGTTCTGCTGTGCCAGAAACCCCTT
AAGAAAAAGCGAAGGAATTTTCGCAGAGCTGAAGATCAAGCGCCTGAGAAAGAAGTTTGCCCAAAGATGCTTCGA
AAGGCAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAAGGAATATAGGCAGATGTACAGAACTGAA
ATTGGAATGGCGAGGATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGCGTTTGTCTC
AGAATCAGAGGTATCAATGGAGTGAGCCCAAAGGTTGAAAGGTGTTGCAGCTTCTTCGCCTTCGTCAAATCTTC
AATGGAACCTTTGTGAAGCTCAACAAGGCTTCGATTAACATGCTGAGGATTGTAGAGCCATATATTGCATGGGGG
TACCCCAATCTGAAGTCAGTAAATGAACTAATCTACAAGCGTGGTTATGGCAAATCAATAAGAAGCGAATTGCT
TTGACAGATAACGCTTTGATTGCTCGATCTCTTGGTAAATACGGCATCATCTGCATGGAGGATTGATTCATGAG
ATCTATACTGTTGGAAAACGCTTCAAAGAGGCAAATAACTTCCTGTGGCCCTTCAAATTGTCTTCTCCACGAGGT
GGAATGAAGAAAAAGACCACCCATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGAGGACCAGATCAACAGGCTT
ATTAGAAGAATGAACTAAGGTGTCTACCATGATTATTTTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTC
AAATTGAAAAAAA

WO 2004/030615

PCT/US2003/028547

2791/6881
FIGURE 2570

MEGVEEKKKEVPAVPETLKKKRRNFAELKIKRLRKKFAQKMLRKARRKLIYEKAKHYHKEYRQMYRTEIRMARMA
RKAGNFYVPAEPKLAFVIRIRGINGVSPKVRKVLQLLRQLRQIFNGTFVKLNKASINMLRIVEPYIAWGYPNLKSV
NELIYKRGYKINKKRIALTDNALIARSLGKYGIICMEDLIHEIYTVGKRFKEANNFLWPFKLSSPRGGMKKKTT
HFVEGGDAGNREDQINRLIRRMN

WO 2004/030615

PCT/US2003/028547

2792/6881
FIGURE 2571

CTCGCGCCAGCAGTTTTTTGGCTTTACCCCCCATCAGTGACCAAAGACTTGACCACTCAAAGTCCAGCTCCCCAG
AACACTGCTCGACATGGAAACCAGTGTGATTGAAGGTGGATTAAATATCACTCTCACCATCCGACTACTTATGCA
TGGAAGGAAGTTGGCAGTATCATCGGAAAGAAAGGAGAATCAGTTAAGAAGATGCGCGAGGAGAGTGGTGCACC
TATCAACATCTCAGAAGGGAATTGTCCTGAGAGAATTATCACTTTTGCTGGACCTGCTAATGCCGTCTTCAAAGG
CTTTGCTATGATCATTGACAACTGGAAGAGGACATAAGCAGCTCTATGACCAGTAGCACAGCTGCCAGTAGACC
CCCAGTCACCCTGAGGCTGGTGGTCCCTGCTAGTCAGTGTGGCTCTCTCATTGGAAAAGGTGGTTGCAAGATCAA
GGAAATACGAGAGAGTACAGGGGCTCAGGTCTAGATGGCAGGGGATATGCTACCCAACCTCAACTGAGCAGGCCAT
CACTATTGCTGGCATCCCACAATCCATCATTGAGTGTGTCAAACAGATCTGTGTGGTCATGTTGGAGTCCCCCCC
GAAGGGCGTGACCATCCCGTACCAGCTCAAGCCTTCCAGCTCTCCGGTCATCTTGCAGGCGGTCAGGCCTATAC
CCTTCAAGGACAGTTTGCCATTCCACAGCCAGATTGACCATGCTGCACCAGTTGGCAATGCAACAGTCTCATTTT
TCCCATGACGCATGGCAACACTGGATTCAGTGCAGGTTTGGATACATCTGCTCAGACTACTTCTCATGAACCTTAC
CATTCCAAACGATTTGATTGGCTGCATAATCGGGCGTCAAGGCGCCAAAATAAATGAGATCCGTCAGATGTCTGG
GGCACAGATCAAATTGCGAACCCAGTGAAGGATCTACTGATAGGCAGGTTACCATCACTGGATCTGCTGCCAG
CATTAGCCTGGCTCAATATCTAATCAATGTCAGGCTTTCCCTCGGAGACGGGTGGCATGGGGAGCAGCTAGAACAA
TGCAGATTTATCCACAATCCCTTTCTGCTGTTACCACCACCCATGATCCATCTGTGTAGTTTCTGAACAGTCAG
CGATTTTCAAGTTTTAAATAGTTTGTAATTTTCAGTTTCTACACACTTTATCATCCACTCGTGATTTTTTACTTA
AAGTGTTTTAATTCCTTT

WO 2004/030615

PCT/US2003/028547

2793/6881
FIGURE 2572

CCCGGCCGGCCGCCCATAGCCAGCCGTCCGTACCTCTTCACCGCCCCCTCAGACCGCCCCAAGGTCCCCCGCC
GCCGCTCCAGCGCCGCCGCTGCAGCCGCCTCTCTTTAGTCGCCGCCATGGCGACCCCGTCCACCTCGCAGGAGCG
CCAGGACTACAACCAGGACTCAGAGGCCGCCATCAACCGCCACATCAACCTGGAGCTCTGCGCCTCCTACTTTTA
CCTGTCCATGTCTTATACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATACTTTCTTTACCAATCT
CATGAGGAGAGGGAACATGCTGAGAACTGATGAAGCTGCAGAACCAACGAGGTGGCCGAATCTTCCTTCAGGAT
ATCAAGAAACCAGACTGTGATGACTGGGAGAGCGGGCTGAATGCGATGGAGTGTGCATTATATTTGGAAAAAAT
GTGAATCAGTCACTACTGGAACGTACAAACTGGCCACTGACAAAAATGACCCCCATTTGTGTGACTTCATTGAG
ACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTGAGTGACCACGTGACCAACTTGCGCAAGATGGGA
GCGCCCGAATCTGGCTCGGCAGAAATATCTCTTCGACAAGCACACCCTGGGAGACAGTGATAATGAAAGCTAAGTC
TCAGGCTAATTTCCCCATAGCCGTGGGGTGCCTTCCTTGGTCACCAAGGCAGTGCGTGCACGTTAGGGTTTCCTT
TACCTTTTCTATAAGTTGTACCAAAACATCCACTTAAGTTCTTTGATTTGTACCATTCCCTCAAATAAAGAAATT
TGGTACCAAAATAATTAATAAATAAAAAATTAAAAAAA

WO 2004/030615

PCT/US2003/028547

2794/6881
FIGURE 2573

MKLQNQRGGRIFLQDIKKPCDDWESGLNAMECALYLEKNVNQSLLELYKLATDKNDPHLCDFIETHYLNEQVKA
IKELSDHVTNLRKMGAPESGSAEYLFDKHTLGSDNES

WO 2004/030615

PCT/US2003/028547

2795/6881
FIGURE 2574

CCGCCGCTGCAGCCGCCTCTCTTTAGTCGCCGCCATGGCGACCCCGTCCACCTCGCAGGAGCGCCAGGACTACAA
CCAGGACTCAGAGGCCGCCATCAACCGCCACATCAACCTGGAGCTCTGCGCCTCCTACTTTTACCTGTCCATGTC
TTATACTTTGACCGCGATGATGTGGCTTTGAAGAAGCTTTGCCAAATACTTTCTTTACCAATCTCATGAGGAGAGG
GAACATGCTGAGAACTGATGAAGCTGCAGAACCAACGAGGTGGCCGAATCTTCCTTCAGGATATCAAGAAACCA
GACTGTGATGACTGGGAGAGCGGGCTGAATGCGATGGAGTGTGCATTATATTTGGAAAAAATGTGAATCAGTCA
CTACTGGAAGTGTACAACTGGCCACTGACATGAAAGCCATCAAAGAATTGAGTGACCACGTGACCAACTTGCGC
AAGATGGGAGCGCCCGAATCTGGCTCGGCAGAATATCTCTCGACAAGCACACCCTGGGAGACAGTGATAATGAA
AGCTAAGTCTCAGGCTAATTTCCCATAGCCGTGGGGTGCCTTCCTTGGTCACCAAGGCAGTGCGTGCACGTTAG
GGTTTCCTTTACCTTTTCTATAAGTTGTACC

WO 2004/030615

PCT/US2003/028547

2796/6881
FIGURE 2575

ACCGCCGACGCAGACCCCTCTCTGCACGCCAGCCGCCCGCCGCCACCCACCCATGGCCACAGTTCAGCAGCTGGAAGGA
AGATGGCGCCTGGTGGACAGCAAAGGCTTTGATGAATACATGAAGGAGCTAGGAGTGGGAATAGCTTTGCGAAAA
ATGGGCGCAATGGCCAAGCCAGATTGTATCATCACTTGTGATGGTAAAAACCTCACCATAAAAACTGAGAGCACT
TTGAAAACAACACAGTTTTCTTGTACCCTGGGAGAGAAGTTTGAAGAAACCACAGCTGATGGCAGAAAACTCAG
ACTGTCTGCAACTTTACAGATGGTGCATTGGTTCAGCATCAGGAGTGGGATGGGAAGGAAAGCACAATAACAAGA
AAATTGAAAGATGGGAAATTAGTGGTGGAGTGTGTCATGAACAATGTCACCTGTACTCGGATCTATGAAAAAGTA
GAAATAAAAATTCCATCATCACTTTGGACAGGAGTTAATTAAGAGAATGACCAAGCTCAGTTCAATGAGCAAATCT
CCATACTGTTTCTTTCTTTTTTTTTTTTCACTACTGTGTTCAATTATCTTTATCATAAACATTTTACATGCAGCTAT
TTCAAAGTGTGTTGGATTAATTAGGATCATCCCTTTGGTTAATAAATAAATGTGTTTGTGCT

WO 2004/030615

PCT/US2003/028547

2797/6881
FIGURE 2576

MATVQQLEGRWRLVDSKGFDEYMKELGVGIALRKMAMAKPDCIITCDGKNLTIKTESTLKTTQFSCITLGEKFEE
TTADGRKTQTVCNFTD GALVQH QEWDGKESTITRKLKDGLVVECMNNVTCTRIYEKVE

WO 2004/030615

PCT/US2003/028547

2798/6881
FIGURE 2577

GCTACCTACAGAGGGGTCCATACGGCGTTGTTCTGGATTCCCCTCGTAACTTAAAGGGAACTTTACAATGTCC
GGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTTAGGTGGC
ACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGTATCTACATCATAAATCTGAAG
AGGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCCATTGTTGCCATTGAAAACCCCTGCTGATGTCAGTGTTATA
TCATCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGCTGGCTGC
TTCACTCCTGGAACTTTCACTAACCAGATCCAGGCAGCCTTCCAGGAGCCACGACTTCTTGTTGGTTACTGACCCC
AGGGCTGACCACCAGCCTTTACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTGTGTAACACAGATTCT
CCTCTGCGCTATGTGCACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTGGGTTTGATGTGGTGGATG
CTGGCTTGGAAGTTCTGTGCATGCGTGGCACCATTTCCCCTGAACACCCGTGGGAGGTCATGCCTGATTTCTGC
TTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGCCTGCTGCTGAAAAGGCTGTGACCAAGGAGGAATTT
CAGGGTGAAAGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGTGTG
CAGGTGCCCTCTGTGCCTATTACAGCAGTTCCCTACTGAAGACTGCAGCGCTCAGCCTGCCACGGAAGACTGGTCT
GCAGCTCCCCTGCCCAGGCCACTGAATGGGTAGGAGCAACCACTGAATGGTCTTAAGCTGTTCTTGCATAGGCT
CTTAAGCAATATGGAAAAATGGTGGATGGAAAATAAACATCAGTTTCT

WO 2004/030615

PCT/US2003/028547

2799/6881
FIGURE 2578

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAIVAIENPADVS
VISSRNTGQRAVLKFAAATGATPIAGCFTPGETFTNQIAAFQEPRLLVVTDPRADHQPFTASYVNLPTIALCNT
DSPLRYVHIAIPCNNKGAHSVGLMWWMLAWEVLCMRGTISRHPWEVMPDFCFYRDPEEIEKEEQPAAEKAVTKE
EFQGERTAPAPEFTATQPEVADWSEGVQVPSVPIQQFTEDCSAQPATEDWSAAPTQAQATEWVGATTEWS

WO 2004/030615

PCT/US2003/028547

2800/6881
FIGURE 2579

TGGATGCAGCT**ATGA**ATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCCGTCTCAAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGAGTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGACCATGACTCCGTGGATAAGATTGTCATTAGAAATACC
ATACTGTGAATGGCCACAAGTGTGAAGTTACAAAAGCCCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCC
AAAGAGGTCGAAGTGGTTCTGGAAACTTTGGTGGTGGTCGTGGAGGTGGTTTCAGTGGGAACGACAACCTTTGGTC
ATGGAGGAACTTCAGTGGTCATGGTGGCTTTGGTGGCAGCCATGGTGGTGGTGGATATGGTGGCAATGGGGATG
GCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGAGCTACAAGGATTTTGGCAATTACAACA
ATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCCATGGTGGTGGAG
GCCAGTACTTTGCAAACACGAAACCAAGGTGGCTATGGCGGTTCCAGCAGCAGCAGTAGCTATGGCAGTGGCA
GAAGATTT**TAA**TTAGGAAACAAAGCTCAGCAGGAGAGGAGAGCCAGAGAAGTAACAGGGAGCTACAGGTTACAA
CAGATTTGTGAAGTCAAGCAAGCACAGTGGTGGCAGGGCCTAGCTGCTACAAAGAAGACATGTTTTAGACAAATA
CTCATGTGTATGGGCAAAAAACTCGAGGACTGTATTTGTGACTAATTGTATAACAGGTTATTTTAGTTTCTGTTC
TGTGGAAAGTGTAAAGCATTCCAACAAAGGGTTTTAATGTAGATTTTTTTTTTGCACCCATGCTGTTGATTGCTAA
ATGTAATAGTCTGATCGTGACACTGAATAAATGTCTTTTTTTTTTAATGTGCTGTGTAAAGTTAGTCTACTCTGAA
GCCATCTTGGTAAATTTCCCCAACAGTGTGAAGTTAGAATTCCTTCAGGGTGATGCCAGGTTCTATTTGGAATTT
ATATACAACCTGCTTGGGTGAAGAAGCCATTGTCTTCGGAAACCTTGGTGTAGTTGAAGTATAGTTACTGTGTG
GACCTGAAGTTACCATTAAGGGATTATCCAAGCAAAATCATGGAATTATTGGTTATAAAGTGATTGTTGGT
ACATCCTATGCAATATATCTAAATTGAATAATGGTACCAGATAAAATTATAGATGGGAATGAAGCTTGTGTATCA
TCCATTATCGTATGTAATCAATAAACGATTTAATTCTCTTGAA

WO 2004/030615

PCT/US2003/028547

2801/6881
FIGURE 2580

MNARPHKVDGRVVEPKRAVSREDSQRPGAHLTVKKIFVGGIKEDTEHHLRDYFEQYGKIEVIEIMSDRGSGKKR
GFAFVTFDDHDSVDKIVIQKYHTVNGHNCEVTKALSKQEMASASSSQRGRSGSGNFGGGRGGGFSGNDNFGHGGN
FSGHGGFGGSHGGGGYGGNGDGYNGFGNDGSNFGGGGSYKDFGNYNQSSNFGPMKGGNF GGRSSGPHGGGGQYF
AKPRNQGGYGGSSSSSSSYGSGRRF

WO 2004/030615

PCT/US2003/028547

2802/6881
FIGURE 2581

AAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAA
AATTGAAGTGATTGAAATCATGAGTGACCGAGGCAGTGGCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGA
CCATGACTCCGTGGATAAGATTGTCATTAGAAATACCATACTGTGAATGGCCACAACCTGTGAAGTTACAAAAGC
CCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAACTTTGGTGGTGG
TCGTGGAGGTGGTTTCAGTGGGAACGACAACCTTTGGTCATGGAGGAACTTCAGTGGTCATGGTGGCTTTGGTGG
CAGCCATGGTGGTGGTGGATATGGTGGCAATGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGG
AGGTGGTGGAGCTACAAGGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAA
TTTTGGAGGCAGAAGCTCTGGCCCCCATGGTGGTGGAGGCCAGTACTTTGCAAAGCAGAAGATTTTAATTAGG

WO 2004/030615

PCT/US2003/028547

2803/6881
FIGURE 2582

TGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCCGTCTCAAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGAGTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGACCATGACTCCGTGGATAAGATTGTCATTCAGAAATACC
ATACTGTGAATGGCCACAAGTGTGAAGTTACAAAAGCCCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCC
AAAGAGGTCGAAGTGGTTCTGGAACTTTGGTGGTGGTCGTGGAGGTGGTTTCAGTGGGAACGACAAGTTTGGTC
ATGGAGGAACTTCAGTGGTCATGGTGGGGATGGCTATAATGGATTGTTGTAATGATGGAAGCAATTTTGGAGGTG
GTGGAAGCTACAAGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTG
GAGGCAGAAGCTCTGGCCCCATGGTGGTGGAGGCCAGTACTTTGCAAACACGAAACCAAGGTGGCTATG

WO 2004/030615

PCT/US2003/028547

2804/6881
FIGURE 2583

GGTAGCAGCCATTTAACTGATGTCTTTTTGTATGATTGTTTCATCACTTAATAAAGGATGAATTCAGTTAATGGAG
AATCATCCTCATTTCACCAACTGATAATGCGTCTGTACAGGGTACTCCAGTAGTGTCTGAAGAAAATGCCTTGT
CTCCAAATTGCACTAGTACTACTGTTGAAGATCCTCCAGTTCAAGAAATACTGACTTCCTCAGAAAAACAATGAAT
GTATTCCTTCTACCAGTGCAGAATTGGAATCTGAAGCTAGAAGTATATTAGAGCCTGACACCTCTAATTCTAGAA
GTAGTTCTGCTTTTGAAGCAGCCAAATCAAGACAGCCAGATGGGTGTATGGATCCTGTACGGCAGCAGTCTGGGA
ATGCCAACACAGAAACCTTGCCATCAGGGTGGGAACAAAGAAAAGATCCTCATGGTAGAACCTATTATGTGGATC
ATAATACTCGAACTACCACATGGGAGAGACCACAACCTTTACCTCCAGGTTGGGAAAGAAGAGTTGATGATCGTA
GAAGAGTTTATTATGTGGATCATAACACCAGAACAACAACGTGGCAGCGGCCTACCATGGAATCTGTCCGAAATT
TTGAACAGTGGCAATCTCAGCGGAACCAATTGCAGGGAGCTATGCAACAGTTTAACCAACGATACCTCTATTTCGG
CTTCAATGTTAGCTGCAGAAAATGACCCTTATGGACCTTTGCCACCAGGCTGGGAAAAAAGAGTGGATTCAACAG
ACAGGGTTTACTTTGTGAATCATAACACAAAAACAACCCAGTGGGAAGATCCAAGAACTCAAGGCTTACAGAAATG
AAGAACCCTGCCAGAAGGCTGGGAAATTAGATATACTCGTGAAGGTGTAAGGTACTTTGTTGATCATAACACAA
GAACAACAACATTCAAAGATCCTCGCAATGGGAAGTCATCTGT

WO 2004/030615

PCT/US2003/028547

2805/6881
FIGURE 2584

AGAGTCCGCGCCCTGCGTCCGCGACCAGGAGGATCGGACCTTCGCCTTCGCTGTGCGCCGCCGCCGCCGCCGCCGCGG
CCGTCGGGGCTATTAGTGAAAGATGGTGGATCGCTTGGCAAACAGTGAAGCAAATACTAGACGTATAAGTATAGT
GGAAACTGTTTTGGAGCAGCTGGTCAACCTTTAACTATACCTGGACGAGTTCTTATTGGAGAAGGAGTATTGAC
TAAGTTGTGCAGGAAAAAGCCCAAAGCAAGGCAGTTTTCTGTGTTAATGATATTCTTGATATGGCAATATTGT
CATCCAGAAGAAAAATATAACAAACAACATATTATCCCTGGAAAATGTCACCTATTGATTCCATCAAAGATGA
GGGAGACTTAAGGAATGGATGGCTAATCAAGACACCAACTAAATCTTTGCAGTTTATGCTGCCACTGCTACGGA
GAAATCAGAATGGATGAATCATATAAATAAATGTGTTACTGATTACTCTCCAAAAGTGGGAAGACACCCAGTAA
TGAACATGCTGCTGTCTGGGTTCTGACTCTGAGGCAACTGTATGTATGCGTTGTGAGAAAGCAAATTCACACC
TGTTAATCGTCGCCACCATTGCCGCAAATGTGGTTTTGTGTCTGTGGGCCCTGCTCTGAAAAGAGATTTCTTCT
TCCCAGCCAGTCTCTAAGCCTGTGCGGATTTGTGACTTCTGCTATGACCTGCTTTCTGCTGGGGACATGGCCAC
ATGCCAGCCTGCTAGATCAGACTCTTACAGCCAGTCATTGAAGTCTCCTTTAAATGATATGTCTGATGATGATGA
CGATGATGATAGCAGTGACTAAGGACACATTTGGGAGTATTTAATCAGGTGTGGCTATCTGAGAAATCAACTTTG
GGGGAATGTAAGATTCTGAGCTCTCTCTGTGTTTTGTCTAGCCATGAATTTGCCTGAGAAACTTGTAACCTAT
GTGCCTCAATATATTCCATAGAAAGTAGGTCCCCCTGCCTTCTCCCACTCCTCACACTCTTCTACAGGGATAGGC
TTTTGCAAATATATCAGATAAATTTTTGTTTTCTGTTATTTTTAGGTTATTTTCTTGAAGGTTGGGAAAAGA
TGTTTGTTTTAACAGGTCATGTACTACGTTGTTGTTTTCACTTCTGTTATAAGTAAAACATAAAGCACAGAATGG
TGGGAAAGGGGCTATAATGTGGTTCATTAATAATGTAGCAGCTTTTTTCTAACCATCCTGTCTAATGGTTAAGA
CACCAGTAACAAAACACATGATTTGGAAATACCTTGGCTTTTTCATATACCTAGTGGTGCCTTATCATAATAGC
ACTGTTACATGAAATAAGCCCTACCTTCTTACTTTCTGGTTTGTGAAAAAATACACTGGTGTCTTTGAAGTG
ATAAATGAGTGTTTATGAATGGGTGTAATTAGGAAATACTTCTCATCTGACAGCTACAAATAACTAAGTTTGGA
GGTATTTTCACTCTATATGAATAAATATTTTCCATAAAATAGTTGTGATTATATTTTTGTTTTATATAGGTCCC
AAATTATAATTGTCAAATATATATTTTAAATTAATAAAAGTTGTCATTCTTAGGAATTTGGTTTGAAATTTATCA
GTTATACAGAATTGTCATACTGCATTAGCTTCTACCTTTAGTAAGACATATTTTTTAGGTATAAATCTTATGCT
TTAACATTATTTCTGGATTGAAATCTTATAAAACCTTGAAAATAAACAGTCTCTTTTTTACAAAGCCTGTGTT
AGAGCACAGATTTACCTAGGCTTGAAGATTTGGAAGAAATAATATGTAAGAATGGCCTCAAGGCAGACCACTTTA
AGTTTGCTAGACTTCATATCGTGGAAGTATTGTCTATTTCACTGTGAAACTATCTTGAATTTGCAAATATAGTG
TTATATTTTATAAAGTTTTGTAAATCCCAAACAATATTTCTATTTTTGTAAACAATTGTATGTATAATCTGTA
TTTGAAATCATTTTGCAATCTATGGAAATAGAGTAGCAATTGCTATTTCTAAATTGTGAACTTAAGTCAATCTA
GATTTATTTTGAGAAGTAATTGTTCACTCTTTACTTTTGAGGCAGCCATTAGGTTGAAAGTATATATTTATCATA
TAAACTTGATGCGTTTTGCACTACTCTTTCCATTTATATGCTGCAAACAACACTACAGTCTTTGAAATATGAAAA
TCAGCAGTCTAAAGTTTGTGTTTTAAATCTAAATTTAAAAAATCTTCAAATCTGAATATACCGCAAATGTCATGAG
AAGTTTGATTTCAGTAACTTGTGATGGAGGATCTTTGGTATCTTACTGTTTGGTTAAGGCACTAATTTTACTTAC
CTATTAGATTTTGAAAGTATCTGAGATATACAAATCTCCCTGTAGGAAATGTGAAAGAAAAGCACAACTA
GGGTTTTTTGTTCAATTTGCTTGCTTTTATGATTTTTTTGGTTTGTGTTAATATCAGGTGGATTTTTGTTTCTAA
GCAATATATACATAAAATCAACCAACATATCTGAAAAGGATCATGAAACCTGAGAAATGCTAATGGAGATTTGCT
GGTACATAGGAATCTAGCAAATTCAGGAACCAAGGGGAAATGTTGTGAGATAACATTTACATTGTCAACCTTTAT
TGACTTTGTTTTTACAATAAAAAATATTTTACAACCTT

WO 2004/030615

PCT/US2003/028547

2806/6881
FIGURE 2585

MVDRLANSEANTRRISIVENCFGAAGQPLTIPGRVLIGEGVLTKLCRKKPKARQFFLFNDILVYGNIVIQKKKYN
KQHIIPLENTIDSIDEGDLRNGWLIKTPKSFVYAATATEKSEWMNHINKCVTDLLSKSGKTPSNEHAAVWV
PDSEATVCMRCQKAKFTPVNRHHCRKCGFVVCGPCSEKRFLPSQSSKPVRICDFCYDLLSAGDMATCQPARSD
SYSQSLKSPLNDMSDDDDDDSSD

WO 2004/030615

PCT/US2003/028547

2807/6881
FIGURE 2586GGCGGGCTCCAGGCGAGGCGGTGACGCTCCTGAAAACCTGCGCGCGCGCTCGCGCCACTGCGCCCGGAGCG**ATG**

AAGATGGTCGCGCCCTGGACGCGGTTCTACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCATC
CTGCTCGGCGTCTGGTATCTGATCATCAATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGATCCGGAT
CAGTATAACTTTTCAAGTTCTGAAC TGGGAGGTGACTTTGAGTTCATGGATGATGCCAACATGTGCATTGCCATT
GCGATTTCTCTTCTCATGATCCTGATATGTGCTATGGCTACTTACGGAGCGTACAAGCAACGCGCAGCCTGGATC
ATCCCATTTCTTCTGTTACCAGATCTTTGACTTTGCCCTGAACATGTTGGTTGCAATCACTGTGCTTATTTATCCA
AACTCCATTTCAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTGAATCCT
ACCTGTTTGGTCCTTATTATTCTTCTGTTTATTAGCATTATCTTGACTTTTAAGGGTTACTTGATTAGCTGTGTT
TGGAAGTGTACCGATACATCAATGGTAGGAACTCCTCTGATGTCCTGGTTTATGTTACCAGCAATGACACTACG
GTGCTGCTACCCCCGATGATGATGCCACTGTGAATGGTGTGCCAAGGAGCCACCGCCACCTTACGTGTCTGCC
TAAGCCTTCAAGTGGGCGGAGCTGAGGGCAGCAGCTTGACTTTGCAGACATCTGAGCAATAGTTCTGTTATTTCA
CTTTTGCCATGAGCCTCTCTGAGCTTGTTTGTGCTGAAATGCTACTTTTAAAAATTTAGATGTTAGATTGAAAA
CTGTAGTTTTTCAACATATGCTTTGCTGGAACACTGTGATAGATTAAGTGTAGAATTCTTCTGTACGATTGGGGA
TATAATGGGCTTCACTAACCTTCCCTAGGCATTGAAACTTCCCCCAAATCTGATGGACCTAGAAGTCTGCTTTTG
TACCTGCTGGGCCCCAAAGTTGGGCATTTTCTCTCTGTTCCCTCTCTTTTGAAAATGTAAATAAAACCAAAAA
TAGACAACTTTTTCTTCAGCCATTCCAGCATAGAGAACAAAACCTTATGGAAACAGGAATGTCAATTGTGTAATC
ATTGTTCTAATTAGGTAAATAGAAGTCCTTATGTATGTGTTACAAGAATTTCCCCCACAACATCCTTTATGACTG
AAGTTCAATGACAGTTTGTGTTTGGTGGTAAAGGATTTTCTCCATGGCCTGAATTAAGACCATTAGAAAGCACCA
GGCCGTGGGAGCAGTGACCATCTGCTGACTGTTCTTGTGGATCTTGTGTCCAGGGACATGGGGTGACATGCCTCG
TATGTGTTAGAGGGTGGAAATGGATGTGTTTGGCGCTGCATGGGATCTGGTGCCCTCTTCTCTCTGGATTACATC
CCCACCCAGGGCCCGCTTTTACTAAGTGTTCGCCCTAGATTGGTTCAAGGAGGTCACTCAACTGACTTTATCAA
GTGGAATTGGGATATATTTGATATACTTCTGCCTAACAACATGGAAAAGGGTTTTCTTTTCCCTGCAAGCTACAT
CCTACTGCTTTGAACTTCCAAGTATGTCTAGTCACCTTTTAAAATGTAAACATTTTCAGAAAAATGAGGATTGCC
TTCCTTGATGCGCTTTTACCTTGACTACCTGAATTGCAAGGGATTTTATATATTTCATATGTTACAAAGTCAG
CAACTCTCCTGTTGGTTCATTATTGAATGTGCTGTAAATTAAGTTGTTTGCAATTAACAAGGTTTGCCAC

WO 2004/030615

PCT/US2003/028547

2808/6881
FIGURE 2587

MKMVAPWTRFYNSCCLCCHVRTGTILLGVWYLI INAVVLLILLSALADPDQYNFSSSELGGDFEFMDDANMCIA
IAISLLMILICAMATYGAYKQRAAWIIPFFCYQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVN
PTCLVLIILLFISIILTFKGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVS
A

WO 2004/030615

PCT/US2003/028547

2809/6881
FIGURE 2588

CCTTTCTCGTTCCCCGGCCATCTTAGCGGCTGCTGTTGGTTGGGGGCCGTCCCGCTCCTAAGGCAGGAAGATGGT
GGCCGCAAAGAAGACGAAAAAGTCGCTGGAGTCGATCAACTCTAGGCTCCAACCTCGTTATGAAAAGTGGGAAGTA
CGTCCTGGGGTACAAGCAGACTCTGAAGATGATCAGACAAGGCAAAGCGAAATTGGTCATTCTCGCTAACAACCTG
CCCAGCTTTGAGGAAATCTGAAATAGAGTACTATGCTATGTTGGCTAAAACCTGGTGTCCATCACTACAGTGGCAA
TAATATTGAACTGGGCACAGCATGCGGAAAATACTACAGAGTGTGCACACTGGCTATCATTGATCCAGGTGACTC
TGACATCATTAGAAGCATGCCAGAACAGACTGGTGAAAAGTAAACCTTTTCACCTACAAAATTTACCTGCAAAC
CTTAAACCTGCAAATTTTCCTTTAATAAAATTTGCTTGTTTTAAAAACATTGTAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2810/6881
FIGURE 2589

MVAAKKT KKSLESINSRLQLVMKSGKYVLGYKQTLKMIRQGKAKLVILANNC PALRKSEIEYYAMLAKTGVHHYS
GNNIELGTACGKYRVCTLAIIDPGDSDIIRSMPEQTGEK

WO 2004/030615

PCT/US2003/028547

2811/6881
FIGURE 2590

GCCCACTCCCACCGCCAGCTGGAACCCCTGGGGACTACGACGTCCTCAAACCTTGCTTCTAGGAGATAAAAAGAA
CATCCAGTCA**ATGG**ATAAAAATGAGCTGGTTTCAGAAAGGCCAAACTGGCCGAGCAGGCTGAGCGATATGATGACATG
GCAGCCTGCATGAAGTCTGTAACCTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGCT
TATAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGAGGGTTCGTCTCAAGTATTGAACAAAAGACGGAAGGTGCT
GAGAAAAAACAGCAGATGGCTCGAGAATACAGAGAGAAAAATTGAGACGGAGCTAAGAGATATCTGCAATGATGTA
CTGTCTCTTTTGGAAAAGTTCTTGATCCCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAATGAAA
GGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGTGATGACAAGAAAGGGATTGTGATCAGTCACAACAA
GCATACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACACATCCTATCAGACTGGGTCTGGCCCTT
AACTTCTCTGTGTTCTATTATGAGATTCTGAACCTCCCAGAGAAAAGCCTGCTCTCTTGCAAAGACAGCTTTTGAT
GAAGCCATTGCTGAACCTTGATACATTAAGTGAAGAGTCATACAAAGACAGCAGCTAATAATGCAATTACTGAGA
GACAACCTTGACATTGTGGACATCGGATACCCAAGGAGACGAAGCTGAAGCAGGAGAAGGAGGGGAAAAT**TAACCG**
GCCTTCCAACCTTTTGTCTGCCTCATTCTAAAATTTACACAGTAGACCATTGTGTCATCCATGCTGTCCCAACAATA
GTTTTTTGTTTACGATTTATGACAGGTTTATGTTACTTCTATTTGAATTTCTATATTTCCCATGTGGTTTTTATG
TTTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTTCATCTTGAGGTGGCCAATATGGGG
ATGTGGAATTTTTATACAAGTTATAAGTGTGTCATAGTACTTTTGGTACATTGTGGCTTCAAAGGGCCAGTG
TAAACTGCTTCCATGTCTAAGCAAAGAAAAGTGCCTACATACTGGTTTGTCTGGCGGGGAATAAAAGGGATCA
TTGGTTCCAGTCACAGGTGTAGTAATTGTGGGTACTTTAAGGTTTGGAGCACTTACAAGGCTGTGGTAGAATCAT
ACCCCATGGATACCACATATTAACCATGTATATCTGTGGAATACTCAATGTGTACACCTTTGACTACAGCTGCA
GAAGTGTTCCCTTTAGACAAAGTTGTGACCCATTTTACTCTGGATAAGGGCAGAAACGGTTCACATTCCATTATTT
GTAAAGTTACCTGCTGTAGCTTTTATTATTTTGTCTACACTCATTTTATTTGTATTTAAATGTTTTAGGCAACC
TAAGAACAAATGTAAAAGTAAAGATGCAGGAAAAATGAATTGCTTGGTATTCACTTTCATGTATATCAAGCAC
AGCAGTAAACAAAAACCCATGTATTTAACTTTTTTTTAGGATTTTGTCTTTTGTGATTTTTTTTTTTTTTTTTT
GATACCTGCCTAACATGCATGTGCTGTAAAAATAGTTAACAGGGAAATAACTTGAGATGATGGCTAGCTTTGTTT
AATGTCTTATGAAATTTTCATGAACAATCCAAGCATAATTGTTAAGAACACGTGTATTAAATTCATGTAAGTGGA
ATAAAAGTTTTATGAATGGACTTTTCAACTACTTTCTCTACAGCTTTTCAITGTAATTTAGTCTTGGTTCTGAAAC
TTCTCTAAAGGAAATTGTACATTTTTTGAATTTTATTCCCTTATTCCCTCTTGGCAGCTAATGGGCTCTTACCAAG
TTTAAACACAAAATTTATCATAACAAAAATACTACTAATATAACTACTGTTTCCATGTCCCATGATCCCCTCTCT
TCCTCCCCACCCCTGAAAAAATGAGTTCCTATTTTTTCTGGGAGAGGGGGGGATTGATTAGAAAAAATGTAGTG
TGTTCCATTTAAATTTTGGCATATGGCATTCTTAACCTTAGGAAGCCACAATGTTCTTGGCCCATCATGACATT
GGGTAGCATTAACTGTAAGTTTTGTGCTTCCAAATCACTTTTTGGTTTTTAAGAATTTCTTGATACTCTTATAGC
CTGCCTTCAATTTTGATCCTTTATTCTTTCTATTTGTGAGGTGCACAAGATTACCTTCCTGTTTTAGCCTTCTGT
CTTGTCACCAACCATTCTTACTTGGTGGCCATGTACTTGAAAAAGGCCGCATGATCTTTCTGGCTCCACTCAGT
GTCTAAGGCACCCGTCTTCCTTTGCTTGCATCCACAGACTATTTCCCTCATCCTATTTACTGCAGCAAAATCTCT
CCTTAGTTGATGAGACTGTGTTTATCTCCCTTTAAACCCCTACCTATCCTGAATGGTCTGTCTATTGTCTGCCTTT
AAAATCCTTCCTCTTTCTTCCTCCTCTATTCTCTAAATAATGATGGGGCTAAGTTATACCCAAAGCTCACTTTAC
AAAATATTTCTCAGTACTTTGCAGAAAACACCAAAACAAAAATGCCATTTTAAAAAAGGTGTATTTTTTCTTTTA
GAATGTAAGCTCCTCAAGAGCAGGGACAATGTTTCTGTATGTTCTATTGTGCCTAGTACACTGTAAATGCTCAA
TAAATATTGATGATGGGAGGCAGTGAGTCTTGATGATAAGGGTGAGAACTGAAATCCC

WO 2004/030615

PCT/US2003/028547

2812/6881
FIGURE 2591

MDKNELVQKAKLAEQAERYDDMAACMKSVTEQGAELSNEERNLLSVAYKNVVGARRSSWRVVSSIEQKTEGAEEKK
QQMAREYREKIETELRDICNDVLSLLEKFLIPNASQAESKVFYLMKMGDYYRYLAEVAAGDDKKGIVDQSQQAYQ
EAFEISKKEMQPTHPIRLGLALNFSVFYYEILNSPEKACSLAKTAFDEAIAELDTLSEESYKDSLIMQLLRDNL
TLWTSDTQGDEAEAGEGGEN

WO 2004/030615

PCT/US2003/028547

2813/6881
FIGURE 2592

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTCGCTGCACTAACTGTGCCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAATTCGTCATTTCGAAAC
ATAGTGGAGGCCGCAGCAGTCAGGGACATTTCTGAAGTGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGCAAG
GACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTGAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTGTTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

WO 2004/030615

PCT/US2003/028547

2814/6881
FIGURE 2593

CCTTCTCCCCGGCGGTTAGTGCTGAGAGTGGGAGTGTGTGCTCCGGGCTCGGAACACACATTTATTATTAAAAA
ATCCAAAAAAATCTAAAAAAATCTTTAAAAAACCCAAAAAAATTTACAAAAATCCGCGTCTCCCCCGCCGG
AGACTTTTATTTTTTTTCTTCTCTTTTATAAAATAACCCGGTGAAGCAGCCGAGACCGACCCGCCCGCCCGCGG
CCCCGCAGCAGCTCCAAGAAGGAACCAAGAGACCGAGGCCTTCCCGCTGCCCGGACCCGACACCGCCACCCTCGC
TCCCCGCCGGCAGCCGGCAGCCAGCGGCAGTGGATCGACCCCGTTCTGCGGCCGTTGAGTAGTTTTCAATTCCGG
TTGATTTTTGTCCCTCTGCGCTTGCTCCCCGCTCCCTCCCCCGGCTCCGGCCCCCAGCCCCGGCACTCGCTCT
CCTCCTCTCACGAAAGGTGCGGCCTGTGCCCTGCGGGCAGCCGTGCCGAGATGAACCCAGTGCCCCAGCTA
CCCCATGGCCTCGCTCTACGTGGGGGACCTCCACCCCGACGTGACCGAGGCGATGCTCTACGAGAAGTTCAGCCC
GGCCGGGCCCATCCTCTCCATCCGGGTCTGCAGGGACATGATCACCCGCCGCTCCTTGGGCTACGCGTATGTGAA
CTTCAGCAGCCGGCGGACGCGGAGCGTGCTTTGGACACCATGAATTTTGATGTTATAAAGGGCAAGCCAGTACG
CATCATGTGGTCTCAGCGTGATCCATCACTTCGCAAAAGTGAGTAGGCAACATATTCAATAAAAAATCTGGACAA
ATCCATTGATAATAAAGCACTGTATGATACATTTTCTGCTTTTGGTAACATCCTTTTCATGTAAGGTGGTTTTGTGA
TGAAAATGGTTCCAAGGGCTACGGATTTGTACACTTTGAGACGCAGGAAGCAGCTGAAAAGAGCTATTGAAAAAAT
GAATGGAATGCTCCTAAATGATCGCAAAGTATTTGTTGGACGATTTAAGTCTCGTAAAGAACGAGAAGCTGAAC
TGGAGCTAGGGCAAAAGAATTCACCAATGTTTACATCAAGAATTTTGGAGAAGACATGGATGATGAGCGCCTTAA
GGATCTCTTTGGGCCTGCCTTAAGTGTGAAAGTAATGACTGATGAAAAGTGGAAAAATCCAAAGGATTTGGATTTGT
AAGCTTTGAAAGGCATGAAGATGCACAGAAAGCTGTGGATGAGATGAACGGAAAGGAGCTCAATGGAAAAACAAAT
TTATGTTGGTCGAGCTCAGAAAAAGGTGGAACGGCAGACGGAACTTAAGCGCAAAATTTGAACAGATGAAACAAGA
TAGGATCACCAGATACCAGGGTGTTAATCTTTATGTGAAAAATCTTGATGATGGTATTGATGATGAACGTCTCCG
GAAAGAGTTTTCTCCATTTGGTACAATCACTAGTGCAAAAGGTTATGATGGAGGGTGGTCGCAGCAAAGGGTTTTGG
TTTTGTATGTTTCTCTCCCCAGAAGAAGCCACTAAAGCAGTTACAGAAATGAACGGTAGAATTGTGGCCACAAA
GCCATTGTATGTAGCTTTAGCTCAGCGCAAAGAAGAGCGCCAGGCTCACCTCACTAACAGTATATGCAGAGAAT
GGCAAGTGACGAGCTGTTCCCAACCCTGTAATCAACCCTACCAGCCAGCACCTCCTTCAGGTTACTTCATGGC
AGCTATCCCACAGACTCAGAACCCTGCTGCATACTATCCTCCTAGCCAAGTTGCTCAACTAAGACCAAGTCCTCG
CTGGACTGCTCAGGGTGCCAGACCTCATCCATTCCAAAATATGCCCGGTGCTATCCGCCCAGCTGCTCCTAGACC
ACCATTTAGTACTATGAGACCAGCTTCTTCACAGGTTCCACGAGTCATGTCAACACAGCGTGTTGCTAACACATC
AACACAGACAATGGGTCCACGTCTGCAGCTGCAGCCGCTGCAGCTACTCCTGCTGTCCGCACCGTTCCACAGTA
TAAATATGCTGCAGGAGTTCGCAATCCTCAGCAACATCTTAATGCACAGCCACAAGTTACAATGCAACAGCCTGC
TGTTTCATGTACAAGGTCAGGAACCTTTGACTGCTTCCATGTTGGCATCTGCCCCCTCCTCAAGAGCAAAAGCAAAT
GTTGGGTGAACGGCTGTTTCTCTTATTCAAGCCATGCACCCTACTCTTGCTGGTAAATCACTGGCATGTTGTT
GGAGATTGATAATTCAGAACTTCTTCATATGCTCGAGTCTCCAGAGTCACTCCGTTCTAAGGTTGATGAAGCTGT
AGCTGTACTACAAGCCACCAAGCTAAAGAGGCTGCCAGAAAGCAGTTAACAGTGCCACCGGTGTTCCAACTGT
TTAAATTTGATCAGGGACCATGAAAAGAACTTGTGCTTCACCGAAGAAAAATATCTAAACATCGAAAAACTTAA
ATATTATGGAAAAAAACATTGCAAAATATAAAATAAATAAAAAAAGGAAAGGAAACTTTGAACCTTATGTACCG
AGCAAATGCCAGTCTAGCAAACATAATGCTAGTCTTAGATTACTTATTGATTTAAAAACAAAAAACACAAAAA
ATAGTAAATATAAAAAACAAATTAATGTTTTATAGACCTGGGAAAAAGAATTTTCAGCAAAGTACAAAAATTTA
AAGCATTCCTTTCTTTAATTTTGTAAATCTTTACTGTGGAATAGCTCAGAATGTCAGTTCTGTTTTAAGTAACAG
AATTGATAACTGAGCAAGGAAACGTAATTTGGATTATAAAATCTTGCTTTAATAAAAAATTCCTTAAACAGTG

WO 2004/030615

PCT/US2003/028547

2815/6881
FIGURE 2594

MNPSAPSYPMASLYVGD LHPDVTEAMLYEKFSPAGFILSIRVCRDMITRRSLGYAYVNFQQPADAERALDTMNF D
VIK GKPV RIMWSQRDPSLRKSGVGNIFIKNLDKSIDNKALYDTFSAFGNILSCKVVCDENGSKGYGFVHFETQEA
AERAIEKMNGMLLNDRKVFVGRFKSRKEREAE LGARAKEFTNVYIKNFGEDMDDERLKD LFGPALS VKVMTDESG
KSKGFGFVS FERHEDAQKAVDEMNGKELNGKQIYVGRAQKKVERQTELKRKFEQMKQDRITRYQGVNLYVKNLDD
GIDDERLRKEFS PFGTITSAKVMMEGGRSKGFGFVCFSSPEEATKAVTEMNGRIVATKPLYVALAQRKEERQAHL
TNQYMQRMASVRAPNPVINPYQPAPPSGYFMAAIPQTQNRAAYYPPSQVAQLRPSRWTAQGARPHPFQNMPGA
IRPAAPRPPFSTMRPASSQVPRVMSTQRVANTSTQTMGPRPAAAAAATPAVRTVPQYKYAAGVRNPQQHLNAQP
QVTMQQPAVHVQGQEPLTASMLASAPPQEQKQMLGERLFPLIQAMHPTLAGKITGM LLEIDNSEL LHMLESPESL
RSKVDEAVAVLQAHQAKEAAQKAVNSATGVPTV

WO 2004/030615

PCT/US2003/028547

2816/6881
FIGURE 2595

GCCATTGCCTTGAGTGAGTGTGCCGCTCTCCAGCCCGTTTGAACGCTCCCCGCAGCCACCGCCACCCATTGGAAT
GGCCAACAGGGGACCTGCATTATGGCCTGAGCCAGGAGGTGCAGCAGAAGATTGAGAAACAGTATGATGCAGATC
TGGAGCAGATCCTGATCCAGTGGATCACCACCCAGTGCCGAAAGGATGTGGGCCGGTCCCAGCCTGGACGCGAGA
ACTTCCAGAACTGGCTCAAGGATGGCACGGTGTTATGTGAGCTCATTAAATGCACTGTACCCCAAGGGGCAGGTCC
CAGTAAAGAAGATCCAGGCCTCCACCATGGCCTTCAAGCAGATGGAGAAGATCTCTCAGTTCCTGCAAGCAGCTG
AGCGCTATGGCATTAAACACCACTGACATCTTCCAAACTGTGGACCTCTGGGAAGGAAAGAACATGGCCTGTGTGC
AGCGGACGCTGAGGAATCTGGGTGGGTGGCAGTAGCCTGGGATGATGGGCTCTTCTCTGGGGATCCCAACTGGT
TCCCTAAGAAATCCAAGGAGAATCCTCGGAACTTCTCGGATAACCAAGCTGCAAGAGGGCAAGAACGTGATCGGGC
TACAGATGGGGGGCATCTCAGGCAGGCATGACTGGCTACTGGATGCCACACCAGATCCTTTGATCCCACCCAGG
CCTTGCCCCTGCCCTCCCACGAGTGGTTAATATACATGTAGATATATATTTTAGCAGTGACATTCCCAGAGAGCC
CCAGAGCTCTTAAGCTCCCTTCTGTGAGGGTGAGGGGTTGAGCCTGTCTATCACCTCTGAGGTGCCTGTTGGCA
GCCTCTCCCCCGTGCTTACTAATACATTCCCCTCCCCATACCCATCAAACTGGACCAACTGGCCTCTTCTTTTC
CCCTGGGATCAAAATTTAGGGGCCTCAGTCCCTCACCGCCATGCCCTGGCCTGTTCTGTCTCTCCTTTTTCCCCC
TGGCCTGTTCTGTCTCTGAGCTCTGTGCCCTCCGTTCAATCCATGGCTGGGAGTCAGTGATGCTGCCTCTGCCTT
CTGATGCTGGACTGGCCTTGCTTCTACAAGTATGCTTCTCCACAGCTGTGGCTGCAGGAACCTTAATTTATAGGG
AGGAGCCTGTGGCAGCTGCTGCCCCAGCCACAGCTGCACTGACTGTGCTCACCACACATCTGGGGCAGCCTTCCC
TGGCAGAGGCCCTCATGGCTTCTCATTTTCCATTCCCTTCACTGTGGCTAAGGGGTGGGGTGAGGGGACGGAGAG
GGAGGGCTGCCTACCATGGTCTGGGGCTTGAGGAAGATGAGTTTGTGATTTAAAGAATTTGTCAATTT

WO 2004/030615

PCT/US2003/028547

2817/6881
FIGURE 2596

GGACTCCCTTTTCTTTGGCAAGATCGCGGAGTACGACTTGACTACTCGCATCGCGCACTTTTGGATCGGCATCT
AGTCTTTCGCTTCTTGAATTTCTCTCTGTAAAGGAGATATATAATGAAAAGGAATTATTACAAGGTAAATTGGA
CCTTCTTAGTGATACCAACATGGTAGACTTTGCTATGGATGTATACAAAAACCTTTATTCTGATGATATTCCTCA
TGCTTTGAGAGAGAAAAGAACCACAGTGGTTGCACAACCTGAAACAGCTTCAGGCAGAAACAGAACCAATTGTGAA
GATGTTTGAAGATCCAGAACTACAAGGCAATGCAGTCAACCAGGGATGGTAGGATGCTCTTTGACTACCTGGC
GGACAAGCATGGTTTTAGGCAGGAATATTTAGATACACTCTACAGATATGCAAAATTCAGTACGAATGTGGGAA
TTACTCAGGAGCAGCAGAATATCTTTATTTTTTTTAGAGTGTGGTTCCAGCAACAGATAGAAATGCTTTAAGTTC
ACTCTGGGGAAAGCTGGCCTCTGAAATCTTAATGCAGAATTGGGATGCAGCCATGGAAGACCTTACACGGTTAAA
AGAGACCATAGATAATAATTCTGTGAGTTCTCCACTTCAGTCTCTTCAGCAGAGAACATGGCTCATTCACTGGTC
TCTGTTTGTCTTCTTAATCACCCTAAAGGTCGCGATAATATTATTGACCTCTTCCTTTATCAGCCACAATATCT
TAATGCAATTCAGACAATGTGTCCACACATTCTTCGCTATTTGACTACAGCAGTCATAACAAACAAGGATGTTTCG
AAAACGTCGGCAGGTTCTAAAAGATCTAGTTAAAGTTATTCAACAGGAGTCTTACACATATAAAGACCCAATTAC
AGAATTTGTTGAATGTTTATATGTTAACTTTGACTTTGATGGGGCTCAGAAAAAGCTGAGGGAATGTGAATCAGT
GCTTGTGAATGACTTCTTCTTGGTGGCTTGTCTTGAGGATTTTCATTGAAAATGCCCGTCTCTTCATATTTGAGAC
TTTCTGTCGCATCCACCAGTGTATCAGCATTAAACATGTTGGCAGATAAATTGAACATGACTCCAGAAGAAGCTGA
AAGGTGGATTGTAAATTTGATTAGAAATGCAAGACTGGATGCCAAGATTGATTCTAAATTAGGTCATGTGGTTAT
GGGTAAACAATGCAGTCTCACCCTATCAGCAAGTGATTGAAAAGACCAAAAGCCTTTCCTTTAGAAGCCAGATGTT
GGCCATGAATATTGAGAAGAACTTAATCAGAATAGCAGGTGAGAGGCTCCTAACTGGGCAACTCAAGATTCTGG
CTTCTACTGAAGAACCATAAAGAAAAGATGAAAAAAAAAACTATCAAAGAAAAGATGAAATAATAAAACTATTATA
TAAAGGGTGACTTACATTTTGGAAACAACATATTACGTATAAATTTGAAGAATTGGAATAAAATTGATTCATTT
TAAAAAAA

WO 2004/030615

PCT/US2003/028547

2818/6881
FIGURE 2597

MAEYDLTTTRIAHFLDRHLVFPLLEFLSVKEIYNEKELLQGKLDLLSDTNMVDVFAMDVYKNLYSDDIPHALREKRT
TVVAQLKQLQAETEP IVKMFEDPETTRQM QSTRDGRMLFDYLADKHGFRQEYLD TLYRYAKFQYECGNYS GAAEY
LYFFRVLVPATDRNALSSLWGKLASEILMQNWDAA MEDLTRLKETIDNNSVSSPLQSLQQRTWLIHWSLFVFFNH
PKGRDNIIDLFLYQPQYLNAIQTMCPHILRYLT TAVITNKDVRKRRQVLKDLVKVIQQESYTYKDPITEFVECLY
VNFD FDGAQKKLRECESVLVNDFFLVACLEDFIENARLFIFETFCRIHQ CISINMLADKLNMTPEEAERWIVNLI
RNARLDAKIDSKLGHVVMGNNAVSPYQQVIEKTKSLSFRSQMLAMNIEKKLNQNSRSEAPN WATQDSGFY

PCT/US2003/028547

[illegible]

WO 2004/030615

PCT/US2003/028547

2820/6881
FIGURE 2599

MASRKEGTGSTATSSSSTAGAAGKGKGGSGDSAVKQVQIDGLVVLKIIKHYYEEGQGTEVVQGVLLGLVVEDR
LEITNCFFFPQHTEDDADFDEVQYQMEMMRSRLRVNIDHLHVGWYQSTYYGSFVTRALLDSQFSYQHAIEESVVL
IYDPIKTAQGSLSLKAYRLTPKLMEVCCEKDF SPEALKKANITFEYMFEEVP IVIKNSHLINVL MWELEKKS AVA
DKHELLSLASSNHLGKNLQLLMDRVDEMSQDIVKYNTYMRNTSKQQQKHQYQRRQENMQRQSRGEPPLPEED
LSKLFKPPQPPARMDSLIAGQINTYCQNIKEFTAQNLGKLFMAQALQEYNN

WO 2004/030615

PCT/US2003/028547

2821/6881
FIGURE 2600A

AGTGAATCGGAAAGGAGGCGCCGGCTGTGGCGGCGGGAGCTGCTCGGAAGCTACACCTCGCAAGGGCTCCCC
CCTTTCCCCACCCCTCCCCGACCCTTTTCCCTCCCCGGGCCACCCAGCCCCGCCAACTCCCAGCGGAGAGCA
AGGTTTTCTTCTGTTTTCATAGCCAGCCAGAACAATGTTCTACGCACATTTTGTCTCAGTAAAAGAGGGCCTCT
GGCCAAAATTTGGCTAGCGGCCCATTTGGGATAAGAAGCTAACCAAAGCCCATGTGTTTCAGTGTAATTTAGAGAG
CAGCGTGGAGAGTATCATCTCACCAAAGGTGAAAATGGCATTACGGACATCAGGACATCTCTTACTGGGAGTAGT
TCGAATCTATCACAGGAAAGCCAAATACCTTCTTGCAGACTGTAATGAAGCATTCAATTAAGATAAAGATGGCTTT
TCGGCCAGGTGTGGTTGACCTGCCTGAGGAAAATCGGGAAGCAGCTTATAATGCCATTACTTTACCTGAAGAATT
TCATGACTTTTGATCAGCCACTGCCTGACTTAGATGACATCGATGTGGCCAGCAGTTCAGCTTGAATCAGAGTAG
AGTGGAAGAGATAACCATGAGAGAAGAAGTTGGGAACATCAGTATTTACAAGAAAATGATTTTGGTGATTTTGG
AATGGATGATCGTGAGATAATGAGAGAAGGCAGTGCTTTTGAGGATGACGACATGTTAGTAAGCACTACTACTTC
TAACCTCCTATTAGAGTCTGAACAGAGCACCAGCAATCTGAATGAGAAAATTAACCATTTAGAATATGAAGATCA
ATATAAGGATGATAATTTTGGAGAAGGAAATGATGGTGGAAATATTAGATGACAACTTATTAGTAATAATGATGG
CGGTATCTTTGATGATCCCCCTGCCCTCTCTGAGGCAGGGGTGATGTTGCCAGAGCAGCCTGCACATGACGATAT
GGATGAGGATGATAATGTATCAATGGGTGGGCCTGATAGTCTGATTGAGTGGATCCCGTTGAACCAATGCCAAC
CATGACTGATCAAACAACACTTGTTCAAATGAGGAAGAAGCATTTCATTGGAGCCTATTGATATAACTGTTAA
AGAAACAAAAGCCAAGAGGAAGAGGAAGCTAATTGTTGACAGTGTCAAAGAGTTGGATAGCAAGACAATTAGAGC
CCAACCTTAGTGATTATTCAGATATTGTTACTACTTTGGATCTGGCACCGCCACCAAGAAATTGATGATGTGGAA
AGAGACAGGAGGAGTAGAAAACTGTTTTCTTTACCTGCTCAGCCTTTGTGGAATAACAGACTACTGAAGCTCTT
TACACGCTGTCTTACACCGCTTGTACCAGAAGACCTTAGAAAAAGGAGGAAAAGGAGGAGAGGCAGATAATTTGGA
TGAATTCCTCAAAGAATTTGAAAATCCAGAGGTTCCTAGAGAGGACCAGCAACAGCAGCATCAGCAGCGTGATGT
TATCGATGAGCCATTATTGAAGAGCCAAGCCGCTCCAGGAGTCAGTGATGGAGGCCAGCAGAACAAACATAGA
TGAGTCAGCTATGCCTCCACCACCCTCAGGGAGTTAAGCGAAAAGCTGGACAAAATTGACCCAGAGCCTGTGAT
GCCTCCTCAGCAGGTAGAGCAGATGGAAATACCACCTGTAGAGCTTCCCCCAGAAGAACCTCCAAATATCTGTCA
GCTAATACCAGAGTTAGAACTTCTGCCAGAAAAAGAGAAGGAGAAAAGAGAAGGAAAAAGAGATGATGAAGAGGA
AGAGGATGAAGATGCATCAGGGGGCGATCAAGATCAGGAAGAAAAGAGATGGAACAAAAGGACTCAGCAGATGCT
TCATGGTCTTCAGCGTGCTCTTGCTAAACTGGAGCTGAATCTATCAGTTTGCTTGAGTTATGTGCAAAATACGAA
CAGAAAACAAGCTGCCGCAAAGTTCTACAGCTTCTTGGTTCTTAAAAAGCAGCAAGCTATTGAGCTGACACAGGA
AGAACCGTACAGTGACATCATCGCAACACCTGGACCAAGGTTCCATATTATATAAGGAGCTAGAAGCATTATAGC
TAGTGTTTGATTCACTAGTGCTTACAAATTGCCCCCATGTGTAGGGGACACAGAACCCTTTGAGAAAACCTTAGAT
TTTTGTCGTACAAAGTCTTTGCCCTTTTCTTCTTCAATTTTTTCCAGTACATTAAATTTGTCAATTTTCATCTT
TGAGGGAACCTGATTAGATGGGTTGTGTTTGTGTTCTGATGGAGAAAACAGCACCCCAAGGACTCAGAAGATGAT
TTAACAGTTTCAAGACAGATGTGTGCAATATTGGTGCATGTAATAATGTTGAGTGGCAGTCAAAAGTCATGATTT
TTATCTTAGTTCTTCACTGCAATGAAAAGGAAAACCTGTCTGAGAAAATGCCTGACAGTTTAAATTTAAACT
ATGGTGTAAGTCTTTGACAAGAAAAAACAACAAACACTTCTTTCCATCAGTAACACTGGCAATCTTCTGT
TAACCACTCTCCTTAGGGATGGTATCTGAAACAACATGGTCACCCCTCTTGAGATTCGTTTTAAGTGTAATTCCA
TAATGAGCAGAGGTGTACGCGAAATTGTGTTATGACTGATAGCCTTCAGCTACAAAAGATAGGACTGACCTGGT
TTAAAGTGTTCTATTTTGTAATCATTCCATTGAGTCTTCTGATGAACCTGGCTATACTGAAATCTGTTATTT
TAGTGAGGCTCCAAAATGAGCAAAGCTAGGCCTGATTAGAGTAGAGTGACTATTAAAAACATAACTTTCTAGGA
GCTATAAATCAAAGTTTTAAAAAGATGTTTGGATATATTTGAGTATTCCGATCATGAAACAGAAATTGCCCTGC
CTACTACAAGGACAGACTGATGGGAAATTATGCACCTGGTCAACTTAGCTTTTAAGCAGACGATGCTGTAAAAAC
TAACGGCTTCTCTGATATTTATTGTAAGTTTTAGTACTGATCTCCTTTTCCAGTGCTGCACACTCCTGGTTGGGA
ACTTTAATAGCGTTGCAACGAAATCCTATATCCAGTTTCTGTAAATTTAATTGAAGAAAAATACATCCAAATAAA
GACTTTATTATTAAACAGACCAGATAGCATCAGAAATCATGTGACTGTTATGATTATCAGAATATGTCTTAACCTT
TTAGGGCAAAGTTAAACACTGAAAGTTCTAGCTTAAGTGTTGAAACTTTTGTGGGAAAAAATCACTTTTGAAA
CTCAGACTTCAGTGATATACCAATAATTTAAATTTATGTGAAATGTTTTAAATTTGTGAACCTCGTAATTACTGTT
TTAATGATTTCAGTTTCTTCAGAGTGGTAATTGTATAAAATTTGCTATTGCAGCTTTATATTCAATATGATGTGCCT
GTAAACCAAGGAGTTTTCCCCGTTTGTA AAAAGACATTGTAGATAATTGAATGTTTGATTTTAGAAAGGTCATTA
GTTTCTTGTTACACATTTTGTAGTCTGGTTTTTGTGCTTATCGGGTTTAAATATTGTTCTTGAAAATAGTTGAT

WO 2004/030615

PCT/US2003/028547

2822/6881
FIGURE 2600B

GCTATGTTATGTATAACTTTTCTAATAAAAGTTGTGTTATAAGCTGT

WO 2004/030615

PCT/US2003/028547

2823/6881
FIGURE 2601

MFYAHFVLSKRGPLAKIWLAHWDKKLTKAHVFEKNLESSVESII SPKVKMALRTSGHLLLGVVRIYHRKAKYLL
ADCNEAFIKIKMAFRPGVVDLPENREAAYNAILPEEFHDFDQPLPDLDIDVAQQFSLNQSRVEEITMREEVG
NISILQENDFGDFGMDDREIMREGSAFEDDDMLVSTTTSNLLLESEQSTSNLNEKINHLEYEDQYKDDNFGEGND
GGILDDKLI SNNDGGIFDDPPALSEAGVMLPEQFAHDDMDDEDDNVSMGGPDSVDPVEPMPTMTDQTTLVPNE
EEAFALPIDITVKETKAKRRKRLIVDSVKELDSKTIRAQLSDYSDIVTTLDLAPPTKKLMMWKETGGVEKLFSL
PAQPLWNNRLLKLFTRCLTLPVPEDLRKRRKGGEADNLDEFLEFENPEVPREDQQQQHQQRDVIDEPIIEEPSR
LQESVMEASRTNIDESAMPPPPQGVKRKAGQIDPEFVMPQQVEQMEIPPVELPPEEPPNICQLIPELELLPEK
EKEKEKEKEDDEEEDEDASGGDQDQEERRWNKRTQQLHGLQRALAKTGAESISLLELCRNTNRKQAAKFYSF
LVLKKQQAIELTQEEPYSDIATPGPRFHII

WO 2004/030615

PCT/US2003/028547

2824/6881
FIGURE 2602

GGCGGCGGCGGCAGGAGCCCCGGGAGGCGGAGGCGGGAGGCGGCGGCGGCGGCGGAGACGCAGCAGCGGCAGCGG
CAGC**ATG**TCGGCCGGCGGAGCGTCAGTCCCGCCGCCCGGAACCCGCGGTGTCTTCCCGCCGCCCGGGTCAC
CCTGCCCGCCGGCCCCGACATCCTGCGGACCTACTCGGGCGCCTTCGTCTGCCTGGAGATTCTGTTTCGGGGGTCT
TGTCTGGATTTTGGTTGCCCTCCTCCAATGTTCTCTACCTCTACTACAAGGATGGGTCATGTTTGTGTCCGTGAC
AGCGTTTTTCTTTTCGCTCCTCTTTCTGGGCATGTTCTCTCTGGCATGGTGGCTCAAATTGATGCTAACTGGAA
CTTCTGGATTTTGCCTACCATTTTACAGTATTGTCTTCTATTTTGGAGCCTTTTTATTGGAAGCAGCAGCCAC
ATCCCTGCATGATTTGCATTGCAATACAACCATAACCGGGCAGCCACTCCTGAGTGATAACCAGTATAACATAAA
CGTAGCAGCCTCAATTTTTGCCTTTATGACGACAGCTTGTTATGGTTGCAGTTTGGGTCTGGCTTTACGAAGATG
GCGACCG**TAA**CACTCCTTAGAAACTGGCAGTCGTATGTTAGTTTCACTTGTCTACTTTATATGTCTGATCAATTT
GGATACCATTTTGTCCAGATGCAAAAACATTCCAAAAGTAATGTGTTTAGTAGAGAGAGACTCTAAGCTCAAGTT
CTGGTTTATTTTCATGGATGGAATGTTAATTTTATTATGATATTAAAGAAATGGCCTTTTATTTTACATCTCTCCC
CTTTTCCCTTTCCCTTTTATTTTCTCCTTTCTTTCTGAAAGTTTCCCTTTTATGTCCATAAAATACAAATAT
ATTGTTTCATAAAAAATTAGTATCCCTTTTGTGTTGGTTGCTGAGTCACCTGAACCTTAATTTTAATTGGTAATTAC
AGCCCCIAAAAAAACACATTTCAAATAGGCTTCCCACTAAACTCTATATTTTAGTGTAACCAGGAATTGGCAC
ACTTTTTTTAGAATGGGCCAGATGGTAAATATTTATGCTTCACGGTCCATACAGTCTCTGTGCACAACTATTTCAGT
TCTGCTAGTATAGCGTGAAAGCAGCTATACACAATACAGAAATGAATGAGTGTGGTTATGTTCTAATAAAACTTA
TTTATAAAAACAAGGGGAGGCTGGGTTTAGCCTGTGGGCCATAGTTTGTCAACCACTGGTGTAACCTTAGTTA
TATATGATCTGCATTTTCTTGAACCTGATCATTGAAAACCTTATAAACCTAACAGAAAAGCCACATAATATTTAGTG
TCATTATGCAATAATCACATTGCCCTTTGTGTTAATAGTCAAATACTTACCTTTGGAGAATACTTACCTTTGGAGG
AATGTATAAAATTTCTCAGGCAGAGTCCTGGATATAGGAAAAAGTAATTTATGAAGTAACTTCAGTTGCTTAAT
CAAACCTAATGATAGTCTAACAACTGAGCAAGATCCTCACTGAGAGTGCTTAAATGGGATCCCCAGAGACCATT
AACCAATACTGGAACGGTATCTAGCTACTGATGTCTTACTTTGAGTTTATTTATGCTTCAGAATACAGTTGTTT
GCCCTGTGCATGAATATACCCATATTTGTGTGTGGATATGTGAAGCTTTTCCAAATAGAGCTCTCAGAAGAATTA
AGTTTTTACTTCTAATTATTTTGCATTACTTTGAGTTAAATTTGAATAGAGTATTAAATATAAAGTTGTAGATTC
TTATGTGTTTTTGTATTAGCCAGACATCTGTAATGTTTTTGCAGTGGTGACAGACAAAATCTGTTTTAAATCA
TATCCAGCACAAAACTATTTCTGGCTGAATAGCACAGAAAAGTATTTTAACCTACCTGTAGAGATCCTCGTCAT
GGAAAGGTGCCAACTGTTTTGAATGGAAGGACAAGTAAGAGTGAGGCCACAGTTCCCAACACACGAGGGCTTTT
GTATTGTTCTACTTTTTCAGCCCTTTACTTTCTGGCTGAAGCATCCCCTTGGAGTGCCATGTATAAGTTGGGCTA
TTAGAGTTCATGGAACATAGAACAACCATGAATGAGTGGCATGATCCGTGCTTAATGATCAAGTGTTACTTATCT
AATAATCCTCTAGAAAAGAACCTGTAGATCTTGGTTTGTGATAAAAATATAAAGACAGAAGACATGAGGAAAAA
CAAAAGGTTTGAGGAAATCAGGCATATGACTTTATACTTAACATCAGATCTTTTCTATAATATCCTACTACTTTG
GTTTTCTAGCTCCATACCACACACCTAAACCTGTATTATGAATTACATATTACAAAGTCATAAATGTGCCATAT
GGATATACAGTACATTCTAGTTGGAATCGTTTACTCTGCTAGAATTTAGGTGTGAGATTTTTTGTTCCTCAGGTA
TAGCAGGCTTATGTTTGGTGGCATTAAATTGGTTTCTTTAAATGCTTTGGTGGCACTTTTGTAAACAGATTGCT
TCTAGATTGTTACAAACCAAGCCTAAGACACATCTGTGAATACTTAGATTGTTAGCTTAATCACATTCTAGACTT
GTGAGTTGAATGACAAAGCAGTTGAACAAAATTTAGGCATTTAAGAATTTAACATGTCTTAGCTGTAAAAATGA
GAAAGTGTGGTTGGTTTTAAATCTGGTAACCTCCATGATGAAAAGAAATTTATTTTATACGTGTTATGTCTCTA
ATAAAGTATTCAATTTGATAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2825/6881
FIGURE 2603

MSAGGASVPPPPNPAVSFPPPRVTLFAGPDILRTYSGAFVCLEILFGGLVWILVASSNVPLPLLQGWVMFVSVTA
FFFSLLFLGMFLSGMVAQIDANWNFLDFAYHFTVFVFYFGAFLLEAAATSLHDLHCNTTITGQPLLSDNQYNINV
AASIFAFMTTACYGCSLGLALRRWRP

WO 2004/030615

PCT/US2003/028547

2826/6881
FIGURE 2604

GGCGCGCTTTCAAACGCTCAGGTTTCTACCTTCCGGCTGCTTGGGAACCTCTTTCTTGCCCGCCAAGCCCGCAG
CCACCCGGGCGCGCGCGGACTCCTAGACCCGGCGCTGCGATGAAGAGGACCCGCGACGAGGTGGATGCGACGCTG
CAGATCGCCAAGCTGAATGCGGCCGAGCTGCTGCCGGCGGTGCACTGCCTGGGCTTCGGCCCTGGGGCCAGCGGC
GCTGCAGCCGGCGACTTCTGCCTGCTGGAGCTGGAGCCCACGCTGTGCCAGCAGCTGGAGGATGGACACAGTCTT
GTGATTTCGTGGTGATAAAGACGAGCAAGCTGTGCTGTGCAGTAAAGACAAAACATACGACTTGAAGATAGCAGAC
ACTTCCAATATGTTGCTTTTCATTCTGGTTGTAAACTCCGGACCAGTTGAAGAAGGAAGATTACACTGTAAC
ATTATTCACACTGAGATCTTTGGTTTTCTAATAATTATTGGGAATTAAGAAGACGTAGACCCAAGTTAAAGAAG
CTAAAGAAACTTTTGATGGAAAATCCATATGAAGGACCTGACAGTCAAAAAGAGAAGGATTCAAATAGCTCAAAA
TATACAACTGAAGATTTGCTTGATCAAATTCAGGCAAGTGAGGAAGAAATAATGACCCAATTACAAGTTCTAAAT
GCCTGTAAGATTGGAGGTTATTGGAGGATTCTTGAATTTGATTATGAGATGAACTTCTGAATCATGTAACCTCAG
CTTGTTGATTCTGAATCATGGTCTTTTGGTAAAGTTCTTTGAACACATGCCTTCAGGAACCTCGGACCATTGGAG
CCAGAGGAAATGATAGAACACTGTCTTAAATGTTATGGGAAGAAATATGTAGATGAAGXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXAGCAGCAGCACGAATGCTACTTCAGAATGCGGTGAAATTCAATCTCGCTGAG
TTTCAAGAAAGTGTGGCAGCAGAGTGTCTCTGAAGGAATGGTAACTAGTCTTGATCAGCTTAAGGGTTTAGCGCTG
GTGGATAGACACTCGAGACCAGAAATCATATTTTTGCTGAAAGTAGATGATTTACCTGAGGATAATCAGGAACGT
TTTAATAGCCTTTTCTCTCTAAGGGAGAAGTGGACAGAAGAAGATATTGCTCCATATATTCAAGATTTGTGTGGA
GAGAAGCAAACCATAGGTGCATTACTACTAAATATTCTCATTCTTCGATGCAAAATGGTGTTAAAGTTTATAAT
TCGAGAAGACCCATTTCTTAAAAGAACAACGGTCTTTTCTTCAGGACTCAAGTTGCTTTATAAAGTTGCTGGATA
GAAGAAAAATAACTTGACTTTTATTCTGACTTTTAGAAACCTAGTCTTCTAAGGCATTTTCTCCTCATCTTA
AGCATTTTGAAACTACTGTTATTCTTAAATGTTATAGGATGTAGCTTTAAATTTATATTTGTACTATGTACACA
GTGTAAACAAGGACAAAAGAATTCTTCTCTATATTATGTCTGAGGTCTCTATGATTTATTTAAAGTTTGGCTTTT
TATATTTAAATGTCATTTCTTTACTTAGGATTTGATGTTCTAATCATTAAATACACTTAAGTTTTCAGAGAACT
AAATAGTAATAGTTTCATAGAAGAGAACTATTTATCACTTAAATATCATTTCTCAAGTGAGTGAGTTCCCTCT
ACTTTTAGCCTTCCACCCAACTGGAAGCCTCTAGGTGCTATCAATTATTTATATCCATCGTTTACATCCATGAA
ATTGGCTGAATAATTACTCCTCTGCCTGGCGTAGACATGCGCTTTGGGAAAAAACGAGTTTATAATCCTATAAT
GAAGAATACTGGCACAGGCAATGCTCACTCGAAAACCTCAAGTAATTTCTAGTTGGTTTTGGAATGCTTGATAAA
GTTCTTTTACAGCTTTATTTTCTGATTTGTTTTGGTTTTAGATCAAAGTTCAAATTAATTTTAACTTAGCTAATG
AACTCATCACCAGGACAGTTGGAGGGGGTAGGCCGAGGTTAAATGGTCCACGTTTCAAAAATGTTAATGGCTAAT
CCATAATTAAGAAGGTTTAACTGTTACTGAAGTTTACAAGTTTTATTGTCATGAACATGAATACAAACACGAT
GGCTTCGAAATGTCTTTCAATAAATGTTTCTGCATTT

WO 2004/030615

PCT/US2003/028547

2827/6881
FIGURE 2605

ACGCCCTATACAACCTTGGCTTCACATACTTTTACACTAACTTTATATGATTTTTAAAACTGGTCTGATCGGACT
TCTCGTCCTGGGACACTGTTTACTGGAGTCTGGCCGGCTCTCCGTGCTCCTCTTGGTACCTCATTTTGGGGAGAA
CCTTAAACCCACTCGAGCAGATAATCTCCGCCTTGACCGGTGCCACCAAAGAAGCCTTGGAAACCATGTGGACTTT
TCTGGGCATTGCCACTTTCACCTATTTTTATAAGAAGTTCGGGGACTTCATCACTTTGGCCAACAGGGAGGTCCT
GTTGTGCGTGCTGGTGTTCCTCTCGCTGGGCCTGGTGCTCTCCTACCGCTGTGCCACCGAAACGGGGGTCTCCT
CGGGCGCCAGCAGAGCGGCTCCCAGTTCGCCCTCTTCTCGGATATTCTCTCAGGCCTGCCTTTCATTGGCTTCTT
CTGGGCCAAATCCCCCCTGAATCAGAAAATAAGGAGCAGCTCGAGGCCAGGAGGCGCAGAAAAGGAACCAATAT
TTCAGAAAACAAGCTTAATAGGAACAGCTGCCTGTACATCAACATCTTCTCAGAATGACCCAGAAGTTATCATCGT
GGGAGCTGGCGTGCTTGGCTCTGCTTTGGCAGCTGTGCTTTCCAGAGATGGAAGAAAGGTGACAGTCATTGAGAG
AGACTTAAAAGAGCCTGACAGAATAGTTGGAGAATTCTGTCAGCCGGGTGGTTATCATGTTCTCAAAGACCTTGG
TCTTGGAGATACAGTGAAGGTCTTGATGCCCAGGTTGTAAATGGTTACATGATTATCATGATCAGGAAAGCAAATC
AGAGGTTTCAAGATTCTTACCCTCTGTCAGAAAACAATCAAGTGCAGAGTGAAGAGCTTTCATCACGGAAGATT
CATCATGAGTCTCCGAAAGCAGCTATGGCAGAGCCCCAATGCAAAGTTTATTGAAGGTGTTGTGTTACAGTTATT
AGAGGAAGATGATGTTGTGATGGGAGTTTCACTACAAGGATAAAGAGACTGGAGATATCAAGGAACCTCCATGCTC
CACTGACTGTTGTTGCAGATGGGCTTTTCTCCAAGTTCAGGAAAAGCCTGGTCTCCAATAAAGTTTCTGTATCAT
CTCATTTTGTGGCTTTCTTATGAAGAATGCACCACAGTTTAAAGCAAATCATGCTGAACCTATTTTAGCTAACCC
CGAGTCCAGTTCTCATCTACCAGATTTTATCCAGTGAAACTCGAGTACTTGTGACATTAGAGGAGAAATGCCAA
GGAATTTAAGAGAATACATGGTTGAAAAAATTTACCCACAAATACCTGATCACCTGAAAGAACCATTCTTAGAAG
CCACTGACAATTCTCATCTGAGGTCCATGCCAGCAAGCTTCCCTTCCCTTTCATCAGTGAAGAAACGAGGTGTTT
TTCTTTTGGGAGACGCATATAATATGAGGCATCCACTTACTGGTGGAGGAATGACTGTTGCTTTTAAAGATATAA
AACTATGGAGAAAACCTGCTAAAGGGTATCCCTGACCTTTATGATGATGCAGCTATTTTCGAGGCCAAAAATCAT
TTTACTGGGCAAGAAAAACATCTCATTCCTTTGTGCTGAATATCCTTGTCTCAGGCTCTTTATGAATTATTTTCTG
CCACAGATGATTCCCTGCATCACTAAGAAAAAGCCTGTTTTCTTTATTTCAAACCTTGGTGGCGAATGTGTTGCGG
GTCCTGTTGGGCTGCTTTCTGTATTGTCTCCTAACCTCTAGTTTTAATTGGACACTTCTTTGCTGTTGCAATCT
ATGCCGTGATTTTTTGCTTTAAGTCAGAACCTTGGATTACAAAACCTCGAGCCCTTCTCAGTAGTGGTGCTGTAT
TGTACAAAGCGTGTTCTGTAATATTTCTCTAATTTACTCAGAAATGAAGTATATGGTTCATTAAAGCTTAAAGG
GAACCATTTGTGAATGAATATTTGGAACTTACCAAGTCCTAAGAGACTTTTGGAGAGGATATATATAGCATAGT
ACCATACCACTTATAAAGTGGAACTCTTGGACCAAGATTTGGATTAATTTGTTTTTGAAGTTTTTGTATATAA
ATATGTAAATACATGCTTTAATTTGCAATTTAAATGAAGGGGTAAATAAGTTAGACATTTAAAGAAATGATT
GTTACCATAAATTAGTGCTAATGCTGAGGAGAACTACAGTTTTTCTTTTGAATTTAGTATTTGAGATGAGTTGTT
GGGACATGCAATAAATGAAGAATGA

WO 2004/030615

PCT/US2003/028547

2828/6881
FIGURE 2606

GGCAGAGCCCCGCTCAGTCACCCGCAGCAGGCGTGAGTTTCCCGGCTCTCCGCGCGGCCGGGGAAGGTCAGCGC
CGTAATGGCGTTCTTGCGGTCGGGACCCTACCTGACCCATCAGCAAAAGGTGTTGCGGCTTTATAAGCGGGCGCT
ACGCCACCTCGAGTCGTGGTGCGTCCAGAGAGACAAATACCGATACTTTGCTTGTTTGATGAGAGCCCGGTTTGA
AGAACATAAGAATGAAAAGGATATGGCGAAGGCCACCCAGCTGCTGAAGGAGGCCGAGGAAGAATTCTGGTACCG
TCAGCATCCACAGCCATACATCTTCCCTGACTCTCCTGGGGGCACCTCCTATGAGAGATACGATTGCTACAAGGT
CCCAGAATGGTGCTTAGATGACTGGCATCCTTCTGAGAAGGCAATGTATCCTGATTACTTTGCCAAGAGAGAACA
GTGGAAGAAACTGCGGAGGGGAAAGCTGGGAACGAGAGGTTAAGCAGCTGCAGGAGGAAACGCCACCTGGTGGTCC
TTTAACTGAAGCTTTGCCCCCTGCCCGAAAGGAAGGTGATTTGCCCCCACTGTGGTGGTATATTGTGACCAGACC
CCGGGAGCGGCCCATGTAGAAAGAGAGAGACCTCATCTTTCATGCTTGCAAGTGAAATATGTTACAGAACATGCA
CTTGCCCTAATAAAAAATCAGTGAAATGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2829/6881
FIGURE 2607

MAFLASGPYLTHQQKVLRLYKRALRHLESWCVQRDKYRYFACLMRARFEEHKNEKDMAKATQLLKEAEEEFWYRQ
HPQPYIFPDSPGGTSYERYDCYKVPFEWCLDDWHPSEKAMYPDYFAKREQWKKLRRESWEREVKQLQEETPPGGPL
TEALPPARKEGDLPLWWYIVTRPRERPM

WO 2004/030615

PCT/US2003/028547

2830/6881
FIGURE 2608

CTGCTCGCGGCCGCCACCGCCGGGCCCCGGCCGTCCTGGCTCCCCTCCTGCCTCGAGAAGGGCAGGGCTTCTCA
GAGGCTTGCGGGAAAAAGAACGGAGGGAGGGATCGCGCTGAGTATAAAAGCCGGTTTTTCGGGGCTTTATCTAAC
TCGCTGTAGTAATTCCAGCGAGAGGCAGAGGGAGCGAGCGGGCGGCCGGCTAGGGTGGAAGAGCCGGGCGAGCAG
AGCTGCGCTGCGGGCGTCCGGAAGGGAGATCCGGAGCGAATAGGGGGCTTCGCCTCTGGCCCAGCCCTCCCGC
TGATCCCCCAGCCAGCGGTCCGCAACCCTTGCCGCATCCACGAACTTTGCCCATAGCAGCGGGCGGGCACTTTG
CACTGGAACCTACAACACCCGAGCAAGGACGCGACTCTCCGACGCGGGGAGGCTATTCTGCCCATTTGGGGACA
CTTCCCCGCCGCTGCCAGGACCCGCTTCTCTGAAAGGCTCTCCTTGACGCTGCTTAGACGCTGGATTTTTTTCGG
GTAGTGGAACACAGCAGCCTCCCGCGACGATGCCCTCAACGTTAGCTTCACCAACAGGAACCTATGACCTCGAC
TACGACTCGGTGCAGCCGTATTTCTACTGCGACGAGGAGGAGAACTTCTACCAGCAGCAGCAGCAGAGCGAGCTG
CAGCCCCCGCGCGCCAGCGAGGATATCTGGAAGAAATTCGAGCTGCTGCCACCCCGCCCTGTCCCCTAGCCGC
CGCTCCGGGCTCTGCTCGCCCTCCTACGTTGCGGTACACCCCTTCTCCCTTCGGGGAGACAACGACGGCGGTGGC
GGGAGCTTCTCCACGGCCGACCAGCTGGAGATGGTGACCGAGCTGCTGGGAGGAGACATGGTGAACAGAGTTTC
ATCTGCGACCCGGACGACGAGACCTTCATCAAAAACATCATCATCCAGGACTGTATGTGGAGCGGCTTCTCGGCC
GCCGCCAAGCTCGTCTCAGAGAAGCTGGCCTCCTACCAGGCTGCGCGCAAAGACAGCGGCAGCCCCGAACCCGCC
CGCGGCCACAGCGTCTGCTCCACCTCCAGCTTGTACCTGCAGGATCTGAGCGCCGCCGCTCAGAGTGCATCGAC
CCCTCGGTGGTCTTCCCCTACCCTCTCAACGACAGCAGCTCGCCCAAGTCTGCGCCTCGCAAGACTCCAGCGCC
TTCTCTCCGTCTCGGATTCTCTGCTCTCCTCGACGGAGTCTCCCCGAGGGCAGCCCCGAGCCCTGGTGCTC
CATGAGGAGACACCGCCCACCACCAGCAGCGACTCTGAGGAGGAACAAGAAGATGAGGAAGAAATCGATGTTGTT
TCTGTGAAAAGAGGCAGGCTCCTGGCAAAGGTGAGAGTCTGGATCACCTTCTGCTGGAGGCCACAGCAAACCT
CCTCACAGCCCAGTGGTCTCAAGAGGTGCCACGTCTCCACACATCAGCACAACTACGCAGCGCCTCCCTCCACT
CGGAAGGACTATCCTGCTGCCAAGAGGGTCAAGTTGGACAGTGTGAGAGTCTGAGACAGATCAGCAACAACCGA
AAATGCACCAGCCCCAGGTCTTCGGACACCGAGGAGAATGTCAAGAGGCGAACACACAACGTCCTTGAGCGGCCAG
AGGAGGAACGAGCTAAAACGGAGCTTTTTTGCCCTGCGTGACCAGATCCCGGAGTTGGAAAAACAATGAAAAGGCC
CCCAAGGTAGTTATCCTTAAAAAGCCACAGCATACATCCTGTCCGTCCAAGCAGAGGAGCAAAAGCTCATTCT
GAAGAGGACTTGTTGCGGAAACGACGAGAACAGTTGAAACACAACTTGAACAGCTACGGAACTCTTGTCGCTAA
GGAAAAGTAAGGAAAACGATTCTTCTAACAGAAATGTCTGAGCAATCACCTATGAACTTGTTTCAAATGCATG
ATCAAATGCAACCTCACAACCTTGCTGAGTCTTGAGACTGAAAGATTTAGCCATAATGTAACTGCCTCAAATT
GGACTTTGGGCATAAAAGAACTTTTTTATGCTTACCATCTTTTTTTTTCTTTAACAGATTTGTATTTAAGAATT
GTTTTTAAAAATTTTAA

WO 2004/030615

PCT/US2003/028547

2831/6881
FIGURE 2609

GGTAATTCATTTGCACACCTGTTAGCAAGAAACAGAAGTTGAAGGACTGGAACAAGTGAAGTGAAGGAAAGAGGGAA
CGCCAATCCAAGGATAGAAGGACAAGGACAGAATCACCAGCACTGGCTGAAGGTACCTTAACATGGGGAATCTTC
TTAAAGTTTTGACATGCACAGACCTTGAGCAGGGGCCAAATTTTTTCTTGATTTTGAAAATGCCAGCCTACAG
AGTCTGAGAAGGAAATTTATAATCAGGTGAATGTAGTATTAAAAGATGCAGAAGGCATCTTGAGGAGCTTGCAGT
CATACAGAGGAGCTGGCCACGAAATACGAGAGGCAATCCAGCATCCAGCAGATGAGAAGTTGCAAGAGAAGGCAT
GGGGTGAGTTGTTCCACTAGTAGGCAAATTAAGAAATTTTACGAATTTTCTCAGAGGTTAGAAGCAGCATTAA
GAGGTCTTCTGGGAGCCTTAACAAGTACCCCATATTCTCCACCCAGCATCTAGAGCGAGAGCAGGCTCTTGCTA
AACAGTTTGCAGAAATCTTCATTTACACTCCGGTTTGATGAAGTCAAGATGACAAATCCTGCCATACAGAATG
ATTTCAGCTATTATAGAAGAACATTGAGTCGTATGAGGATTAACAATGTACCGGCAGAAGGAGAAAATGAAGTAA
ATAATGAATTGGCAAATCGAATGTCTTTGTTTTATGCTGAGGCAACTCCAATGCTGAAAACCTTGAGTGATGCCA
CAACAAAATTTGTATCAGAGAATAAAAATTTACCAATAGAAAATACCACAGATTGTTTAAGCACAAATGGCTAGTG
TATGCAGAGTCATGCTGGAAACACCGGAATACAGAAGCAGATTTACAAATGAAGAGACAGTGTCATTCTGCTTGA
GGGTAATGGTGGGTGTCATAATACTCTATGACCACGTACATCCAGTGGGAGCATTGCTAAAACCTTCCAAAATTG
ATATGAAAGGTTGTATCAAAGTTCTTAAGGACCAACCTCCTAATAGTGTGGAAGGTCTTCTAAATGCTCTCAGGT
ACACAACAAAACATTTGAATGATGAGACTACCTCCAAGCAAATTAATCCATGCTGCAATTAACAATTCTGGAATA
AGCACCTGCTGTAGACAGAAGACAGTATTCTGCAATGACTGAGAATGCAGTTTTTTAGTGATTGCAATTACTATC
TCATTTATTCTTGCTTTTTATTTCTTTCTCTGTTCTCTTCCCTCTTTTTTAATCATGTTCTTAAGACTTCTTTT
CTGTGCCAAAATCAGTAAAGTTACACTCTGAAGGGATATCATCCTTTCAAACGGGCCATCTAAGGCAGCTAATTA
TGCATTGCATTGGGGTCTCTACTGAGAAAAATCTGTGACTTGAAGTAAATATTTTTAAATGTGGATTTTTTTTG
AAACTAATATTTAATATTGCTTCTCCTGCATGGCAAACTGCCTATTCTGCTATTTAAAAACCTCAATGACTTT
ATTTTCTACTGCCGCCTTTTTTCATGTGCAACCAAAATGAAAATGTTTAAATTAAGTGTGTGTACAAATGGTACC
CAACACAACTTTTTTTAAATTAGTAATACTTTTGTTTAAAGTTTTAAGTTTGATTTTGACTTTTTTTGTAAGG
ATGTATGTTGTGTGTTTAACTTTATTAACCTAACGTTAAAAGCTGTGATGTGTGCGTAGAATATTACGTATGCAT
GTTTCATGTCTAAAGAATGGCTGTTGATGATAAAATAAAAATCAGCTTTCATTTTTCT

WO 2004/030615

PCT/US2003/028547

2832/6881
FIGURE 2610

MGNLLKVLCTDLEQGPNNFFLDFENAQPTSESEKEIYNQVNVVLKDAEGILEDLQSYRGAGHEIREAIQHPADEKL
QEKAWGAVVPLVGKLKKFYEFSSQRLEAALRGLLGALTSTPYSPTQHLEREQALAKQFAEILHFTLRFDELKMTNP
AIQNDFSYYRRTLSRMRINNVPÆGENEVNNELANRMSLFYAEATPMLKTLSDATTKFVSENKNLPIENTTDCLS
TMASVCRVMLETPEYRSRFTNEETVSFCLRVMVGVIILYDHVHPVGAFAKTSKIDMKGCIKVLKDQPPNSVEGLL
NALRYTTKHLNDETTSKQIKSMLQ

WO 2004/030615

PCT/US2003/028547

2833/6881
FIGURE 2611

CTAATTTCTAGATTAGACGTTGGTAGGGAGGCCGATAAGTCAAAGTGGCAAGTGTGTCAGTGTACACCAAAGGGA
GCGACCAGAACAGAGTAAAGCCCATAAACCAGTAAAAACAAACAACACCACAGTCCCTCAAAGCTGTAGGCCAC
GTAGTATGAGGGAAACAGCACCACCGCTGGGGCAGTGTGTCATCAGAAGAGCATTAGGAAGAGGTCCGTATCTTG
CAGTTTATGTTGAAGTTTCTGGTAAAGATGGTCAGAAGCGGGAACCTGACACTTCAAAGTGGAAGCTTCAGTTAC
CTGGGCGCCCAAGGGGAGGTGTTCTCCCCAGTGATGCCGGGCAAATGAACCAACAGCTGGATCATACTTCTCATT
TGACATGCTTTTTGGGGGACCTACGTGGGGTTCAGCACTGCGCCGGGCCACAGATTTGCAGGGCCAATGAGGATG
TGGTCCCTGCCCCGGAGCCTGATGCTCTAAGTGCTGAGGGTGGAGGGCTTCCCGGAGGAGGTGTTCTCTGAGGAG
AGTGCAATGTGGCTGGGTGTGAGCTCTGAGCACAGAAGTCACTTGGGGATCATAGCAGTTTGTGTTGTGAGGGACA
GTGTG

WO 2004/030615

PCT/US2003/028547

2834/6881
FIGURE 2612

GCTCCGGGCCAGCCGCGGTCCAGAGCGCGAGGTTTCGGGGAGCTCGGCCAGGCTGCTGGTACCTGCGTCCGCCC
GGCGAGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATGAAGATCTTCTT
GCCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTGATGTGCTTCTCCTGCTTGAACCAGAA
GAGCAATCTGTACTGCCTGAAGCCGACCATCTGCTCCGACCAGGACAATACTGCGTGACTGTGTCTGCTAGTGC
CGGCATTGGGAATCTCGTGACATTTGGCCACAGCCTGAGCAAGACCTGTTCCCCGGCCTGCCCCATCCCAGAAGG
CGTCAATGTTGGTGTGGCTTCCATGGGCATCAGCTGCTGCCAGAGCTTTCTGTGCAATTTTCAGTGCGGCCGATGG
CGGGCTGCGGGCAAGCGTCACCCCTGCTGGGTGCCGGGCTGCTGCTGAGCCTGCTGCCGGCCCTGCTGCGGTTTGG
CCCCTGACCGCCCAGACCCTGTCCCCCGATCCCCCAGCTCAGGAAGGAAAGCCCAGCCCTTTCTGGATCCCACAG
TGTATGGGAGCCCCCTGACTCCTCACGTGCCTGATCTGTGCCCTTGGTCCCAGGTCAGGCCCCACCCCTGCACCTC
CACCTGCCCCAGCCCCCTGCCTCTGCCCCAAGTGGGGCCAGCTGCCCTCACTTCTGGGGTGGATGATGTGACCTTC
CTTGGGGGACCGCGGAAGGGACGAGGGTTCCCTGGAGTCTTACGGTCCAACATCAGGACCAAGTCCCATGGACAT
GCTGACAGGGTCCCCAGGGAGACCGTGTGAGTAGGGATGTGTGCCCTGGCTGTGTACGTGGGTGTGCAGTGCACGT
GAGAGCACGTGGCGGCTTCTGGGGGCCATGTTTGGGGAGGGAGGTGTGCCAGCAGCCTGGAGAGCCTCAGTCCCT
GTAGCCCCCTGCCCTGGCACAGCTGCATGCACTTCAAGGGCAGCCTTTGGGGGTTGGGGTTTCTGCCACTTCCGG
GTCTAGGCCCTGCCCCAAATCCAGCCAGTCTGCCCCAGCCCACCCCCACATTGGAGCCCTCCTGCTGCTTTGGT
GCCTCAAATAAATACAGATGTCCCC

WO 2004/030615

PCT/US2003/028547

2835/6881
FIGURE 2613

TGTTGAGAGGCTGGCCTGCGGTGATGTGGCCAAAGAGGAAGAGCTGGGCTGGGGTGAGTGTGGTCACATGGTTG
AAACTAGGTGGGGAGGGGAGTGGTCCAGGGGAGAGTCCAGGCCAGCTCTGCTGGGACTTGCCATGGGGGTACG
ACTCATCTGCAGGGAAGGTCTGGGCTTTATCTCTGAGCACCTCTGTGTGCTGCTCACCCTGAAGTGGGGGTGGGC
CTGTGCCTGGCCTGTCCCCATCCTGGGAGCTCCCAATGCCATCTGCAAGGCTGTGGACCCCTCAGGAGTGGC
CTGGAGCCTGGCTCCCATTGCCACATGGTGGCTGTGTGTGTGGAGAGGGTTGATAGTGGAGTGGTCAGGCCCAGG
CTGCCCTGGGGGATGAAGTGCCATCCTCTGGGTGCCCTGGAGAAAGAAGAGAAGTCAAGTGGGCCCTGTCTGGTAC
TTTCTGGAGGAGGGCTCCCATGCTGGCCCTCCACCCCTCTGTCCCTGTACCCTGAGGCCTCTGGATTTCTCTC
TCTGCCCTTCCCAACCTGCCAATTCACGGGTTTCTGGCTGGGTTCTGGGGATGGCCCTAGGGGAGACGGGCCA
GGCACAAGCGGGGCTGTGTCAAGGTGGGTATGCAGGGGTAGCACAAGTGTGCAGAGCCTGGGGAGGCATGGGCAA
AGCATGGCAGGCGGGCGGGGAGGGGATCTTGGAAGGTACGGGCTGGGGAGCAGTGTGGGCAGCGGCCAGAGGT
GGGAAGGCCGTAGCTTAGCTGGGTGTCCCCTTTCTGTCTCTGCAGGTGGAGCCCCCTGAGCTGCCGCTGATCT
GCAGCACTGGATCTCCTACAACGAGGCCAGCAGCCAGCTGCTCCGCATGGAGAGTGGGCTCAGTGATGTCACCAA
GGACCAGTGACCGCCACCTTCACACCGTCTGCCCTGGCCACCATCCTGGGCCTGGGGGCTGCCACAGATGGGCA
GTCTCAGCCATACTCTGTTCCAGCTGGAGTAGCCTCCTGACCAGCCTGGCCACCCTGCTCCACCCACTGGGCC
CCCCAGTTATTGATACCCCTCTGTGCTGGGCTCCACGCTAGGCAGAAGGAGGAGTGGCATTGGCATCCTGACCCA
GCTCTGCCCTCAAGGTGGGGATGGATGGGCAAAGGAGAGTCTGCCTGGCCCTACGATGAGGCCACTCATGTGGG
CCTAGGTAGGGGAGGATGGTGCCTGGAGCAGAGGGACCCACAAGTGCCTCCCGAGCCTAGATCCTGGCTCGGACC
ACTGCAAGGGCCGAGGCAGGGCCAGACCAGAGCATCCTGGGTACAGGCCTGGGCTCTCCAGGGCCTGGGCCTGAT
TCAGGTGCAGTGGGCACTCCTGAAGGGTCAGAGCGGCATCTGCCAGGCAGCCCTCTGGCTTCCGCTGAGGTGGT
TGCAGGCCTGGGGCAGAGCCTGGGTGGTCAGAGGCCGGGGCTAGAGGCAGATGGAAGGGAGGCATTTGCTGACAG
AGGACGGGGCACCCGGGCTCCCCACTGCAGTCGGCCTTGCCCTCCTCCTCCTCTACCTCCAGTCAGGCTGGAC
GGGAGGGTAGCCTTGTGGCTGAGAGGGGTGAGTGGTGGCACAGGGGCTCCTGGAAAGACAGCAGGCTTCCTG
CTGGGCGTTCCCTTGTGGAGGGAATAGAGTGGGGGTGGGACTCTGCAGGGGTGTCCTTGTCCACTCGCACCCCT
CGCCGCCCACCAGGGCCATGCTCTGTGACTTGGGCTGATCCCCACCCCTTCTGGGCCTACAGCACCAACAGGCCG
TGTACCCCTTAGAGCTGCCCCTCTCTGGCCTGGCCGGCAGGCGTCTTCTTAACTCCTTTGTCTCTATATTAG
CATGTTTCCTTGTGAGCTGCTGGGCCGGCCCTGCCTTGCCTAGCAGAGCCTCTCCTGGCAGCTTCTCAGGTCTCC
CTAATGGAGACACCAGCCTGAGGCTCCAGCTGATGCCCTCAGCTCCCAGAGAGGGGGTGCCCCATCTAGCTGGGT
GCAGGGGTCACTGCTTGTGAGCTCAGGGCCCTGTGCCCCGCTTGCCCTGTTCCTTACATCTGTGCTGCACATCCA
GAAGTGCCTCCTTGCCGCTGCCTCCAGGAAGCCACCTTGAGCCAGAGTCAAGGGCTGCAGCACTGCCCGATAGA
ACACGCCCCCCTCACTGCTGTTCTTGCCCTACAGCCACCATGGGAAAGCTGCAACCTTTCTGTTTTATTAAAG
AAAGCCCAACATTAAAGGGTTTTTCATTGC

WO 2004/030615

PCT/US2003/028547

2836/6881
FIGURE 2614

GGGCACCGTAACCAGCGCCGCGGACACCGGCACCGGCGCCACGGACTCCGCAGGACCCCGCGCCCGCCGCCGCG
CTATGCTGGGGCTGCTGGTGGCGTTGCTGGCCCTGGGGCTCGCTGTCTTTGCGCTGCTGGACGTCTGGTACCTGG
TGCGCCITCCGTGCGCCGTGCTGCGCGCGCGCTGCTGCAGCCGCGCGTCCGTGACCTGCTAGCTGAGCAGCGCT
TCCCGGGCCGCGTGCTGCCCTCGGACTTGACCTGCTGTTGCACATGAACAACGCGCGCTACCTGCGCGAGGCCG
ACTTTGCGCGCGTGCAGCACCTGACCCGCTGCGGGGTGCTCGGGGCGCTGAGGGAGTTGCGGGCGCACACGGTGC
TGGCGGCCCTCGTGCAGCGGCCACCGCCGCTCGCTGCGCCTGCTGGAGCCCTTCGAGGTGCGCACCCGCGCTGCTGG
GCTGGGACGACCGCGCTTCTACCTGGAGGCGCGCTTTGTACGCTGCGGGACGGTTTCGTGTGCGCGCTGCTGC
GCTTCCGGCAGCACCTGCTGGGCACCTCACCCGAGCGCGTCTGTCAGCACCTGTGCCAGCGCAGGGTGGAGCCCC
CTGAGCTGCCCCGTGATCTGCAGCACTGGATCTCTACAACGAGGCCAGCAGCCAGCTGCTCCGCATGGAGAGTG
GGCTCAGTGATGTACCAAGGACCAGTGACCGCCACCTTCACACCGTCTGCCCTGGCCACCATCTGGGCCCTGGG
GGCTGCCACAGATGGGCAGTCTCAGCCATACTCTGTTCCAGCTGGAGTAGCCTCCTGACCAGCCTGGCCCCACCC
TGCTCCACCCACTGGGCCCCCCCCAGTTATTGATAACCCCTCTGTGCTGGGCTCCACGCTAGGCAGAAGGAGGAGTG
GCATTGGCATCTGACCCAGCTCTGCCCTCAAGGTGGGGATGGATGGGCAAAGGAGAGTCTGCGCTGGCCCTACG
ATGAGGCCACTCATGTGGGCCCTAGGTAGGGGAGGATGGTGCCTGGAGCAGAGGGACCCACAAGTGCCTCCCGAGC
CTAGATCCTGGCTCGGACCACTGCAAGGGCCGAGGCAGGGCCAGACCAGAGCATCCTGGGTACAGGCCTGGGCTC
TCCAGGGCCTGGGCCCTGATTAGGTGCACTGGGCACTCCTGAAGGGTCAGAGCGGCATCTGCCAGGCAGCCCCCTC
TGGCTTCCGCTGAGGTGGTTGCAGGCCCTGGGGCAGAGCCTGGGTGGTCAGAGGCCGGGGCTAGAGGCAGATGGAA
GGGAGGCATTTGCTGACAGAGGACGGGGCACCCGGGCTCCCCACTGCAGTCGGCCTTGCCCTCCTCCTCCTCT
ACCTCCAGTCAGGCTGGACGGGAGGGTAGCCTTGTTGGCTGAGAGGGGTGAGACTAGGTGGCACAGGGGCTCCTGG
AAAGACAGCAGGCTTCCTGCTGGGCGTTCCCTTGTTGGAGGGAATAGAGTGGGGGTGGGACTCTGCAGGGGTGTC
CTTGTCCTACTCGCACCCCTCGCCGCCCCACAGGGCCATGCTCTGTGACTTGGGCTGATCCCCACCCCTTCTGGGC
CTACAGCACACAGGCCGCTGTACCCCCCTTAGAGCTGCCCCCTCTCTGGCCTGGCCGGCAGGCGTCTTCTTAACCTC
CTCTGTCTCTATATTAGCATGTTCCCTTGTCAGCTGCTGGGCCGGCCCTGCCTTGCGCTAGCAGAGCCTCTCCT
GGCAGCTTCTCAGGTCTCCCTAATGGAGACACCAGGCTACTAGGACACTGGCTGGGGCCACCCCTCCTGCCTAA
TGCCCTCACCTTACAGCTGGGGAACTGAGGCCTGGAATGGCCAGAGTCACCAAGGCAAAGTTGGGGCTGGTCCC
AGCCTGAGGCTCCAGCTGATGCCCTCAGCTCCCAGAGAGGGGGTGCCCCATCTAGCTGGGTGCAGGGGTCACTGC
TTGTCAGCTCAGGGCCCTGTGCCCCGCTTGCCCTGTTCCCTACATCTGTGCTGCACATCCAGAAGTGCCTCCTTG
CCGCTGCCTCCAGGAAGCCACCTTGAGCCAGAGTCAAGGGCTGCAGCACTGCCCGATAGAACACGCCCGCCCTC
ACTGCTGTTCTTGCTTACAGCCACCATGGGAAAGCTGCAACCTTCTGTTTTATTAAAGAAAGCCCAACATTA
AAGGGTTTTATTGCAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2837/6881
FIGURE 2615

MLGLLVALLALGLAVFALLDVWYLVRLPCAVLRARLLQPRVRDLLAEQRFPGRVLP
SDLDLLLHMNNARYLREAD
FARVAHLTRCGVLGALRELRAHTVLAASCARHRRSLRLLEPFVTRLLGWDDRAFYLEARFVSLRDGFVCALLR
FRQHLLGTSPERVVQHLCQRRVEPPELPADLQHWISYNEASSQLLRMESGLSDVTKDQ

WO 2004/030615

PCT/US2003/028547

2838/6881
FIGURE 2616

CTTTCCCGGAGGCTGGCAGATGCGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGCTGCTCGGGGAGGT
CCCCCGCCGCGGCTCCCGGGGTGTCCCGGGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGGTGGGAGAA
GGAGAAGCACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCGTACTTCGCACCCCCATACGAGCC
CCTTCCCGACGGAGTGCCTTTCTTCTATGAAGGAAGGCCCTGTGAGATTGAGCGTGGCAGCGAGGAGGTGCCAC
TTTTTATGGGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCG
AAAGGAAATGGCGGTGGAAGAGAGGGAAGTCATCAAGAGCCTGGACAAGTGTGACTTCACGGAGATCCACAGATA
CTTTGTGGACAAGGCCGAGCCCGGAAAGTCTTGAGCAGGGAGGAGAAGCAGAAGCTAAAAGAGAGGCAGAAAA
ACTTCAGCAAGAGTTCGGCTACTGTATTTTAGATGGTCACCAAGAAAAAATAGGCAACTTCAAGATTGAGCCGCC
TGGCTTGTTCCGTGGCGGTGGCGACCATCCCAAGATGGGGATGCTGAAGAGAAGGATCACGCCAGAGGATGTGGT
TATCAACTGCAGCAGGGACTCGAAGATCCCCGAGCCGCCGGCGGGGCACCAAGTGAAGAGGAGTGGCGTCCGATAA
CACCGTCACGTGGCTGGCAGCTTGGACCGAGAGCGTTTCAAGTCCATCAAGTACATCATGCTGAACCCCTTGCTC
GAAGCTGAAGGGGGAGACAGCTTGGCAGAAGTTTGAACAGCTCGACGCCTGCGGGGATTTGTGGACGAGATCCG
CTCCAGTACCGGGCTGACTGGAAGTCTCGGGAAATGAAGACGAGACAGCGGGCGGTGGCCCTGTATTTTCATCGA
TAAGCTGGCACTGAGAGCAGGAAATGAGAAGGAGGACGGTGAGGCGGCCGACACCGTGGGCTGCTGTTCCCTCCG
CGTGGAGCACGTCCAGCTGCACCCGGAGGCCGATGGCTGCCAACACGTGGTGGAATTTGACTTCCTGGGGAAGGA
CTGCATCCGCTACTACAACAGAGTGCCGGTGGAGAAGCCGGTGTACAAGAACTTACAGCTCTTTATGGAGAACAA
GGACCCCGGGACGACCTCTTCGACAGGCTGACCACGACCAGCCTGAACAAGCACCTCCAGGAGCTGATGGACGG
GCTGACGGCCAAGGTGTTCCGGACCTACAACGCCTCCATCACTCTGCAGGAGCAGCTGCGGGCCCTGACGCGCGC
CGAGGACAGCATAGCAGCTAAGATCTTATCCTACAACCGAGCCAACCGAGTCGTGGCCATTCTCTGCAACCATCA
GCGAGCAACCCCAAGTACGTTTCGAGAAGTCGATGCAGAATCTCCAGACGAAGATCCAGGCAAAGAAGGAGCAGGT
GGCTGAGGCCAGGGCAGAGCTGAGGAGGGCGAGGGCTGAGCACAAAGCCCAAGGGGATGGCAAGTCCAGGAGTGT
CCTGGAGAAGAAGAGGCGGCTCCTGGAGAAGCTGCAGGAGCAGCTGGCGCAGCTGAGTGTGCAGGCCACGGACAA
GGAGGAGAACAAAGCAGGTGGCCCTGGGCACGTCCAAGCTCAACTACCTGGACCCAGGATCAGCATTGCCTGGTG
CAAGCGGTTTCAGGGTGCCAGTGGAGAAGATCTACAGCAAAACACAGCGGGAGAGGTTTCGCCTGGGCTCTCGCCAT
GGCAGGAGAAGACTTTGAATTCTAACGACGAGCCGTGTTGAAACTTCTTTTGTATGTGTGTGTGTTTTTTTCACT
ATTAAAGCAGTACTGGGGAATTTTGTACAATAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2839/6881
FIGURE 2617

MRVVRLRLRAALTLLGEVPRRPASRGVPGSRRTQKGS GARWEKEKHEDGVKWRQLEHKGPYFAPPYEPLPDGVR
FFYEGRPVRLSVAEEVATFYGRMLDHEYTTKEVFRKNFFNDWRKEMAVEEREVIKSLDKCDFTEIHRYFVDKAA
ARKVLSREEKQKLKEEAELQQEFGYCILDGHQEKIGNFKIEPPGLFRGRGDHPKMGMLKRRITPEDVVINCSRD
SKIEPPAGHQWKEVRSDNTVTWLAAWTESVQNSIKYIMLNPCSKLKGETAWQKFETARRLRGFVDEIRSQYRAD
WKSREMKTQRAVALYFIDKLALRAGNEKEDGEAADTVGCCSLRVEHVQLHPEADGCQHVVEFDLFGKDCIRYYN
RVPVEKPVYKNLQLFMENKDPRDDLFDRLLLLTSLNKHLELMDGLTAKVFRTYNASITLQEQRLRALTRAEDSIAA
KILSYNRRANRVVAILCNHQRATPSTFEKSMQNLQTKIQAKKEQVAEARAELRRARAELHKAQGDGKSRVLEKKRR
LLEKLQEQLAQLSVQATDKEENKQVALGTSKLNLYLDPRI SI AWCKRFRVPVEKIYSKTQRRERFAWALAMAGEDFE
F

WO 2004/030615

PCT/US2003/028547

2840/6881
FIGURE 2618

GATGGCGGCGGAGCAGGACCCCGAGGCGCGCGCGGGGCGGCCGCTGCTCACTGACCTCTACCAGGCCACCATGGC
GTTGGGCTATTGGCGCGCGGGCCGGGCGCGGGACGCCCGAGTTCGAGCTCTTCTTCCGCCGCTGCCCCTTCGG
CGGCGCCTTCGCCTTGGTAGCCGGCTTGCGCGACTGTGTGCGCTTCCTGCGCGCCTTCCGCCTGCGGGACGCCGA
CGTGACAGTTCCTGGCCTCGGTGCTGCCCCAGACACGGATCCTGCGTTCTTCGAGCACCTTCGGGGCCCTCGACTG
CTCCGAGGTGACGGTGCGAGCCCTGCCCCGAGGCTCCCTCGCCTTCCCCGAGTGCCGCTCCTGCAGGTGTCCGGG
CCGCTCCTGGTGGTGACGTGCTGGAGACACCGCTGCTCTGCTGGTCAGCTACGCCAGCCTGGTGGCCACCAAC
GCAGCGCGCGTTTCGCTTGATCGCAGGGCCAGAGAAGCGGCTGCTAGAGATGGGCCTGAGGCGGGCTCAGGGCCCG
ATGGGGCCTGACAGCCTCCACCTACAGCTACCTGGGCGGGCTTCGACAGCAGCAGCAACGTGCTAGCGGGCCAGCT
GCGAGGTGTGCCGGTGGCCGGGACCCTGGCCCACTCCTTCGTCACTTCCTTTTCAGGCAGCGAGGTGCCCCCTGA
CCCGATGTTGGCGCCAGCAGCTGGTGAGGGCCCTGGGGTGGACCTGGCGGCCAAAGCCCAGGTGTGGCTGGAGCA
GGTGTGTGCCCACCTGGGGCTGGGGGTGCAGGAGCCGATCCAGGCGAGCGGGCAGCCTTTGTGGCCTATGCCTT
GGCTTTTCCCCGGGCCTTCCAGGGCCTCCTGGACACCTACAGCGTGTGGAGGAGTGGTCTCCCCAACTTCCTAGC
AGTCGCCCTGGCCCTGGGAGAGCTGGGCTACCGGGCAGTGGGCGTGAGGCTGGACAGTGGTGACCTGCTACAGCA
GGCTCAGGAGATCCGCAAGGTCTTCCGAGCTGCTGCAGCCCAGTTCAGGTGCCCTGGCTGGAGTCAGTCCTCAT
CGTAGTCAGCAACAACATTGACGAGGAGGCGCTGGCCCGACTGGCCCAGGAGGGCAGTGAGGTGAATGTATTGG
CATTGGCACCAGTGTGGTCACCTGCCCCAACAGCCTTCCCTGGGTGGTGTCTATAAGCTGGTGGCCGTGGGGGG
CCAGCCACGAATGAAGCTGACCGAGGACCCCGAGAAGCAGACGTTGCCCTGGGAGCAAGGCTGCTTTCCGGCTCCT
GGGCTCTGACGGGTCTCCACTCATGGACATGCTGCAGTTAGCAGAAGAGCCAGTGCCACAGGCTGGGCAGGAGCT
GAGGGTGTGGCCTCCAGGGGCCAGGAGCCCTGCACCGTGAGGCCAGCCAGGTGGAGCCACTACTGCGGCTCTG
CCTCCAGCAGGGACAGCTGTGTGAGCCGCTCCCATCCCTGGCAGAGTCTAGAGCCTTGGCCCAGCTGTCCCTGAG
CCGACTCAGCCCTGAGCACAGGCGGCTGCGGAGCCCTGCACAGTACCAGGTGGTGTGTCGAGAGGCTGCAGGC
CCTGGTGAACAGTCTGTGTGCGGGGCAGTCCCCCTGAGACTCGGAGCGGGGCTGACTGGAAACAACACGAATCAC
TCACTTTTCCCC

WO 2004/030615

PCT/US2003/028547

2841/6881
FIGURE 2619

CAGAAAAATGGCTACAACTTCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGACGACGCAGAAAG
GAGATTCTACGAGCAGATGAACGGGCCTGTGGCAGGTGCCTCCCGCCAGGAGAACGGCGCCCGTGATCCTCCGTG
ACATTGCGAGAGCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGCCTCCAGCGGCACCA
GCGGAGACCACGGTGAGCTCGTCCGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCTGCGTGGCGTGGTAC
AGGAGCTGCAGCAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTCGCCTGGCCACCGGG
CCACGGCCCCACAGACCCAGTGACAATGAGGAGGAGGACAAGGAGGCGGCACAGCTGCGGGAGGAGCGGCTACGG
CAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCCTCCAATCCTGCTGGATGTCAAGCCTTGG
GATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCGCTCTATCCAGCTGGACGGGCTGGTCTGGGGGGCT
TCCAAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACAGATTCAAGTGTGTGGTGGAGGACGACAAGGTGGGG
ACAGACTTGCTGGAGGAGGAGATCACCAAGTTTGAGGAGCACGTGCAGAGTGTGATATCGCAGCTTTCACAAG
ATCTGAAGCCTGAGTGTGTGTACGTGCGCGCGTGCCTGAGGCCCTGCCACGATTAAAGACTGAGAC

WO 2004/030615

PCT/US2003/028547

2842/6881
FIGURE 2620

AGCGCAGCGGCGTCCGAGGCAACAAGATGGCAGCTGCGGAGCCGTCTCCGCGGCGCGTGGGCTTCGTGGGCGCGG
GCCGCATGGCGGGGGCCATCGCGCAGGGCCTCATCAGAGCAGGAAAAGTGGAAGCTCAGCACATACTGGCCAGTG
CACCAACAGACAGGAACCTATGTCACTTTCAAGCTCTGGGTTGCCGACCACGCACTCCAACCAGGAGGTGCTAC
AGAGTGCCCTGCTCGTCATCTTTGCCACCAAGCCTCATGTGCTGCCAGCTGTCTGGCAGAGGTGGCTCCTGTGG
TCACCACTGAACACATCTTGGTGTCCGTGGCTGCTGGGGTGTCTCTGAGCACCTGGAGGAGCTGCTGCCCCAA
ACACACGGGTGCTGCGGGTCTTGCCCAACCTGCCCTGTGTGGTCCAGGAAGGGGCCATAGTGATGGCGCGGGGCC
GCCACGTGGGGAGCAGCGAGACCAAGCTCCTGCAGCATCTGCTGGAGGCCTGTGGGCGGTGTGAGGAGGTGCCTG
AAGCCTACGTGACATCCACACTGGCCTCAGTGGCAGTGGCGTGGCCTTCGTGTGTGCATTCTCCGAGGCCCTGG
CTGAAGGAGCCGTCAAGATGGGCATGCCCAGCAGCCTGGCCCCACGCGATCGCTGCCAGACCCTGCTGGGGACGG
CCAAGATGCTGCTGCACGAGGGCCAACACCCAGCCAGCTGCGCTCAGACGTGTGCACCCCGGGTGGCACCACCA
TCTATGGACTCCACGCCCTGGAGCAGGGCGGGCTGCGAGCAGCCACCATGAGCGCCGTGGAGGCTGCCACCTGCC
GGGCCAAGGAGCTCAGCAGAAAGTAGGCTGGGCTCTGGCCATCCTTTCTGCTCTGTGCCCTGCCTCTCCCTG
TGTCCCTTCCCTGAGGACTGCGGCTCCCTCCCTCCTGCATGAGGGTCTCCTACTGCTCCTTCTCCCTTGCACA
GGGAAATGCAGGGGGCAGGACTTGGGAGGTTCCAGCAGGCGGGGGAGCCCCGACCAGTGGGGACACTCCTCCCTC
CCCAGTGAGCAGAAGGCACCGTGGTGGTGGCTCTGCCCCCTTGCTGCAGTGAGCCACCTTGCTGCAACATTGGTT
CTGAGGGGCCCCAAGAGATGGCGTCTTGGTCAATTTGCCCGCATGGTTGGGCAGTTGGTTGAGGCCATGAACAGAAC
TTACGGTAACAGGCACGGCTGGCCCCAATGCCTGGTCTGGAGCTGGAGCTTGCCTTTGGCTTTCCAGGTGGCTCCG
TGAGCTACAGCCAGGCCGGCTGCCTCATCTCAGCTCTAGGGGGCAGCAGCCATATGGGGTCTGCACAAGAGACC
CTCTCCCTTGCAGTAAAGCCAGGGGGCCCTGGCCTGATGGGGCCCCCATGGGGAGCTGGAGCCTGCCCTGCAGCCT
GGAGAAGAGGGTGGCTGTGGTGGGCGTGCTCATCCCTGCTAAGGAGCAGGAGCTGCTGGGCCAGGTCTGCGGCA
GTGCTGGGGTGGCACCAGGTGGGCAGTGGTAGGTGGGGTGGCTTGAGGTCTGGGAGGGTGGCCCTGGCCAGCCAG
GACACATGCAGACCCCTGGCTTAGTCTGGATACAGGCTCCCTCTTTTCTCCCAATCCTAAGCTCCTGACAAGTGG
CCAGGTGGCTCTGGGCCCTCCTGCCCCGTGCCTAGGTGAGGGTCTGGAATACCCCGTAGCTCTGGCACCACCA
CACTGGCCTCTGATGGCAAGACTTGGCCCCCTCCACCTGTCCCTAACGGACGGCAGGTGAGGAAAGCCAGGACTCA
GGGGAGAAGCAAACCCCCAGGATTGAAGGCTAGGGTTCTAGGGCCTTTGGGTGGGGAGGGCCCCGGGCCGACAGC
CTCAGCTCCGTCCCTTGCCCCACAAGATTACCTGGGCCTCCAGTCCCACGCTGGCCCCAACTGCTGCAGCTCTC
GGCTTCCGCCCAACAGCCTCTGGAGGTGAGGCGGGAGCATGCCCTCAGCGAGGCTGGGCGGCGGGTCTGCTGTG
CCATCTCCCTGTGCGCCTGAGCAGATCAATCCACAGTGCAAAACAGGGCTAACGGCACCTGCAGGACAGCAGCA
CGCTCCATCCCTCATGCTCAGCTGCCTCTGCGGCCACGGACTTCTGCCCTTCATCTGCTCTCTTACTCTCCTG
AGCCTAGCCCGTCCGTAAGCTCCCTCCCTGCCTGGTTCCCAGGGCAGGCTGACTCAGTTGACTGCTTGGTCCAA
GCCTGGCCCTGGCACTTGTCAGGGTCAGCCTAAGGAGATGGGAATAAAGAGGGCCAGAGAGCACCAAGTGAGCTCA
TGTTTC

WO 2004/030615

PCT/US2003/028547

2843/6881
FIGURE 2621

MAAAEPSRRVGFVGAGRMAGATAQGLIRAGKVEAQHILASAPTDRLCHFQALGCRTHSNQEVLSCLLVIFA
TKPHVLPVLAEVAPVVTTEHILVSVAAGVSLSTLEELLPPNTRVLRVLPNLPCVVQEGAIVMARGRHVGSSEK
LLQHLLEACGRCEEVPEAYVDIHTGLSGSGVAFVCAFSEALAEAVKMGMPSSLAHRIAQAQTLLGTAKMLLHEGQ
HPAQLRSDVCTPGGTTIYGLHALEQGGLRAATMSAVEAATCRAKELSRK

WO 2004/030615

PCT/US2003/028547

2844/6881
FIGURE 2622

CGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGTGCTCGGGGAGGTCCCCGCCGCCCGCCTCCCGGGAT
GTCCGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGAAACAGCCAGAAAGGCCCTTTCAGAAATGTCTGTTGC
ACATGCTTTCCCCTCTCAGACCCCTTCAGAGACTTCCTGTTGCTCTGAGGACACTCATCCCAGCCGACCAGGCCAC
CAGGCCCCCAACAGCACTACCTGGCTGGGGTCACGTGCAGGTCTCCTGGCTCTGGCAGGTGGGAGAAGGAGAAGC
ACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCCGTACTTCGCACCCCCATACGAGCCCTTCCCG
ATGGAGTGCCTTTCTTCTATGAAGGAAGGCCTGTGAGATTGAGCGTGGCAGCGGAGGAGGTGCCACTTTTTATG
GGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCGAAAGG

PCT/US2003/028547

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WO 2004/030615

PCT/US2003/028547

2846/6881

FIGURE 2624

MEEKEILRRQIRLLQGLIDDYKTLHGNAFAPGTPAASGWQPPTYHSGRAFSARYPRPSRRGYSSHGPSWRKKYS
LVNRFPGPSDEFPADHAVRPLHGARGGQPPVPQQHVLERQVQLSQGNVVIKVKPPSKSGSASASGAQRGSLEEF
ETPWSQRPREGEGEPFRGQLQPSRPTRARGTCSVEDPLLVCQKEPGKPRMVKSVGSGVGDSPREPRRTVSESVIA
VKASFPSSALPPRTGVALGRKLGSHSVASCAPQLLGDRRVDAGHTDQPVPSGSGVGGPARPASGPRQAREASLVVT
CRTNKFRKNNYKWVAASSKSPRVARRALSPRVAAENVCKASAGMANKVEKPQLIADPEPKPRKPATSSKPGSAPS
KYKWKASSPSASSSSSFRWQSEASSKDHASQLSPVLSRSPSGDRPAVGHSGLKPLSGETPLSAYKVKSRTKIIRR
RSSTSLPGDKKSGTSPAATAKSHLSLRRRQALRGKSSPVLKKTTPNKGLVQVTTHRLCRLPPSRAHLPTKEASSLH
RRGPLQSICQQALQDLRPAQ

WO 2004/030615

PCT/US2003/028547

2847/6881
FIGURE 2625

CTCCTGCGCACGCGGCCCGGTGCTGTCGGAAGCGGCTGTGCGGGTGGCGGCCGGCGCGCGGTGGGGCATGGCGG
GTTTCGCGGGGTGCGGGGCGCACGCGGCGCCGAGCGTGGCGCCGAGAGAAGCGGCGGTCTGAGCCCGAACTGGAGC
CTGAGCCCGAGCCGAGCCCCCTCCTCTGCACCTCTCCTCTCAGCCACAGCACCGGCAGCGATTCTGGCGTCT
CCGACAGCGAGGAGAGTGTGTCTCAGGCCTGGAAGATTCCGGCAGTGACAGCAGTGAGGATGATGACGAAGGCG
ACGAGGAGGGAGAGGACGGAGCCCTTGATGACGAGGGCCACAGTGGGATTAAAAAGACCACTGAGGAGCAGGTGC
AGGCCAGCACTCCTTGCCCCGAGGACAGAGATGGCGAGCGCCCGGATTGGGGATGAGTATGCGGAGGACAGCTCTG
ATGAGGAGGACATCCGGAACACGGTGGGCAACGTGCCCTTGAGTGGTACGATGACTTCCCCACGTGGGCTACG
ACCTGGATGGCAGGCGCATCTACAAGCCCCCTGCGGACCCGGGATGAGCTGGACCAGTTCTGGACAAGATGGACG
ATCCTGACTACTGGCGCACCGTGCAGGACCCGATGACAGGGCGGGACCTGAGACTGACGGATGAGCAGGTGGCCC
TGGTGGCGGGGCTGCAGAGTGGCCAGTTTGGGGATGTGGGCTTCAACCCCTATGAGCCGGCTGTGCACTTCTTCA
GCGGGGACGTCATGATCCACCCGGTGACCAACCGCCCGCCGACAAGCGCAGCTTCATCCCCTCCCTGGTGGAGA
AGGAGAAGGTCTCTCGCATGGTGCACGCCATCAAGATGGGCTGGATCCAGCCTCGCCGGCCCCGAGACCCACCC
CCAGCTTCTATGACCTGTGGGCCAGGAGGACCCCAACGCCGTGCTCGGGCGCCACAAGATGCACGTACCTGCTC
CCAAGCTGGCCCTGCCAGGCCACGCCGAGTCTGTAACCCACCCCTGAATACCTGCTCAGCGAGGAGGAGCGCT
TGGCGTGGGAACAGCAGGAGCCAGGCGAGAGGAAGCTGAGCTTTTTGCCACGCAAGTTCCCGAGCCTGCGGGCCG
TGCCTGCCTACGACGCTTCATCCAGGAACGCTTCGAGCGCTGCCTTGACCTGTACCTGTGCCACGGCAGCGCA
AGATGAGGGTGAATGTAGACCCTGAGGACCTCATCCCCAAGCTGCCTCGGCCGAGGGACCTGCAGCCCTTCCCCA
CGTGCCAGGCCCTGGTCTACAGGGGCCACAGTGACCTTGTCCGGTGCCTCAGTGTCTCTCCTGGGGGCCAGTGGC
TGGTTTCAGGCTCTGACGACGGCTCCCTGCGGCTCTGGGAGGTGGCCACTGCCCCGCTGTGTGAGGACTGTTCCCG
TGGGGGGCGTGGTGAAGAGTGTGGCCTGGAACCCAGCCCCGCTGTCTGCCTGGTGGCTGCAGCCGTGGAGGACT
CGGTGCTGCTGCTGAACCCAGCTCTGGGGGACCGGCTGGTGGCGGGCAGCACAGATCAGCTGTTGAGCGCCTTCG
TCCCGCCTGAGGAGCCCCCTTGACAGCCGGCCCGCTGGCTGGAGGCCCTCAGAGGAGGAGCGCCAAGTGGGCCTGC
GGCTGCGCATCTGCCACGGGAAGCCAGTGACGCAGGTGACCTGGCACGGGCGTGGGGACTACCTGGCCGTGGTGC
TGGCCACCCAAGGCCACACCCAGGTGCTGATTACCAAGCTGAGCCGTCGCCGACGCCAGAGTCCGTTCCGCCGCA
GCCACGGACAGGTGCAGCGAGTGGCCTTCCACCCTGCCCCGCCCCCTTCTGTGGTGGCGTCCCAGCGCAGCGTCC
GCCTCTACCACCTGCTGCGCCAGGAGCTACCAAGAAGCTGATGCCCCAAGTGAAGTGGGTGTCCAGCCTGGCGG
TGCACCCTGCAGGTGACAACGTCATCTGTGGGAGCTACGATAGCAAGCTGGTGTGGTTTGACCTGGATCTTTCCA
CCAAGCCATACAGGATGCTGAGACACCACAAGAAGGCTCTGCGGGCTGTGGCCTTCCACCCGCGGTACCCACTCT
TTGCGTCAGGCTCGGACGACGGCAGTGTCTGCTGCCATGGCATGGTGTACAATGACCTTCTGCAGAACCCCT
TGCTGGTGGCCGTCAAGGTGCTGAAGGGACAGTGTGACCCGAGATCTGGGAGTGTGGACGTATCTTCCACC
CCACCCAGCCGTGGGTCTTCTCCTCGGGGGCAGACGGGACTGTCCGCCTCTTACCTAGCTGTTCTGCCTGCCTG
GGGCTGGGGTGGTGTGCTGAAGTCAACAGAGCCTTTACCCTGTGCTGCCTGGTGTCTCCACCTTCTTGAATTGG
GGTTGCCAACAAAGCCGCCCCACCACA

WO 2004/030615

PCT/US2003/028547

2848/6881
FIGURE 2626

GCCCCGTTGCAAGATGGCGGCGGCCATGCTGGGCCCCGGGGCTGTGTGTGCGCAGCGGGCGGGCGGGCGGGCCCCGGA
AGGCTGGCGCGGCGACGGCGTTAGCCCCGGCCCTCGGCCCTCTTTGCGGCCGCTCCCTCCGCCTATTCCCTCCTT
GCTCGAGATGGATCTGCCCCTGGGCCCCGGCGGGCGGGGCCAGCAACGTCCCGGCCTTCCTGACCAAGCTGTG
GACCCCTCGTGAGCGACCCGGACACCGACGCGCTCATCTGCTGGAGCCCGAGCGGGAACAGCTTCCACGTGTTGCA
CCAGGGCCAGTTTGGCAAGGAGGTGCTGCCCAAGTACTTCAAGCACAACAACATGGCCAGCTTCGTGCGGCAGCT
CAACATGTATGGCTTCCGGAAGTGGTCCACATCGAGCAGGGCGGCCTGGTCAAGCCAGAGAGAGACGACACGGA
GTTCCAGCACCCATGCTTCCGTGCGTGGCCAGGAGCAGCTCCTTGAGAACATCAAGAGGAAAGTGACCAGTGTGTC
CACCCCTGAAGAGTGAAGACATAAAGATCCGCCAGGACAGCGTCACCAAGCTGCTGACGGACGTGCAGCTGATGAA
GGGGAAGCAGGAGTGTCATGGACTCCAAGCTCCTGGCCATGAAGCATGAGAATGAGGCTCTGTGGCGGGAGGTGGC
CAGCCTTCGGCAGAAGCATGCCAGCAACAGAAAGTCGTCAACAAGCTCATTAGTTCTGTATCTCACTGGTGCA
GTCAAACCGGATCCTGGGGGTGAAGAGAAAGATCCCCCTGATGCTGAACGACAGTGGCTCAGCACATTCCATGCC
CAAGTATAGCCGGCAGTTCTCCCTGGAGCACGTCCACGGCTCGGGCCCCCTACTCGGCCCTCCCCAGCCTACAG
CAGCTCCAGCCTCTACGCCCTGATGCTGTGGCCAGCTCTGGACCCATCATCTCCGACATCACCAGCTGGCTCC
TGCCAGCCCCATGGCCTCCCCCGCGGGAGCATAGACGAGAGGCCCTATCCAGCAGCCCCCTGGTGCCTGTCAA
GGAGGAGCCCCCAGCCCGCCTCAGAGCCCCCGGGTAGAGGAGGCGAGTCCCGGGCGCCCATCTTCCGTGGACAC
CCTCTTGTCCCCGACCGCCCTCATTGACTCCATCCTGCGGGAGAGTGAACCTGCCCCCGCCTCCGTACAGCCCT
CACGGACGCCAGGGGCCACACGGACACCGAGGGCCGGCTTCCTTCCCCCCCCGCCACCTCCACCCATGAAAAGTG
CTTCAGGGTAGCCTGCCTGGACAAGAATGAGCTCAGTGACCACTTGGATGCTATGGACTCCAACCTGGATAACCT
GCAGACCATGCTGAGCAGCCACGGCTTCAGCGTGGACACCAAGTGCCTGCTGGACCTGTTTACAGCCCTCGGTGAC
CGTGCCCGACATGAGCCTGCCTGACCTTGACAGCAGCCTGGCCAGTATCCAAGAGCTCCTGTCTCCCCAGGAGCC
CCCCAGGCCTCCCGAGGCAGAGAACAGCAGCCCCGATTAGGGAAGCAGCTGGTGCCTACACAGCGCAGCCGCT
GTTCTGTGAGACCCCGCTCCGTGGACACCGGGAGCAACGACCTGCCGGTGCTGTTTGGAGCTGGGAGAGGGCTC
CTACTTCTCCGAAGGGGACGGCTTCGCCGAGGACCCCAACCATCTCCCTGCTGACAGGCTCGGAGCCTCCCAAAGC
CAAGGACCCCACTGTCTCCTAGAGGCCCCGGAGGAGCTGGGCCAGCCGCCACCCCCACCCCCAGTGACGGGCTG
GCTTGGGGAGGCAGGGCAGCCTCGCGGTCTTGGGCCTGGTGGGTGGGCCGCCATAGCCCCAGTAGGACAAACG
GGCTCGGGTCTGGGCAGCACCTCTGGTCAGGAGGGTCACCCCTGGCCTGCCAGTCTGCCTTCCCCCAACCCCGTGT
CCTGTGGTTTGGTTGGGGCTTCACAGCCACACCTGGACTGACCCTGCAGGTTGTTTATAGTCAGAATTGATTTT
GGATTTTACACAACCTGTCCCGTTCCCCGCTCCACAGAGATACACAGATATATACACACAGTGGATGGACGGACA
AGACAGGCAGAGATCTATAAACAGACAGGCTCT

WO 2004/030615

PCT/US2003/028547

2849/6881
FIGURE 2627

GAAGCTCTGGGAAGGGGATGCCCCGAGGGTGCCAGTCCAGCTAGCTGCCCCACCCCTCAGGCCAGCCTGGCCC
CCAAGCTCCCCACTCTGGTGCCCCGAGCAGCCCTGTGGGCAAGCAGCCGCCGCCATGGCCGAGCACCTGGAGCTG
CTGGCAGAGATGCCCATGGTGGGCAGGATGAGCACACAGGAGCGGCTGAAGCATGCCAGAAGCGGCGCGCCCAG
CAGGTGAAGATGTGGGCCAGGCTGAGAAGGAGGCCAGGGCAAGAAGGGTCCTGGGGAGCGTCCCCGGAAGGAG
GCAGCCAGCCAAGGGCTCCTGAAGCAGGTCTCTTCCCTCCCAGTGTTGTCCTTCTGGAGGCCGCTGCCCGAAAT
GACCTGGAAGAAGTCCGCCAGTTCCTTGGGAGTGGGGTCAGCCCTGACTTGGCCAACGAGGACGGCCTGACGGCC
CTGCACAGTGCTGCATTGATGATTTCCGAGAGATGGTGACAGCTCCTGGAGGCTGGGGCCAACATCAATGCC
TGTGACAGTGAGTGCTGGACGCCTCTGCATGCTGCGGCCACCTGCGGCCACCTGCACCTGGTGGAGCTGCTCATC
GCCAGTGGCGCCAATCTCCTGGCGGTCAACACCGACGGGAACATGCCCTATGACCTGTGTGATGATGAGCAGACG
CTGGAAGTGCCTGGAGACTGCCATGGCAGACCGTGGCATCACCCAGGACAGCATCGAGGCCGCGCGGGCCGTGCCA
GAACTGCGCATGCTGGACGACATCCGGAGCCGGCTGCAGGCCGGGGCAGACCTCCATGCCCCCTGGACCACGGG
GCCACGCTGCTGCACGTGCGAGCCGCCAACGGGTTGAGCGAGGCGGCTGCCCTGCTGCTGGAACACCGAGCCAGC
CTGAGCGCTAAGGACCAAGACGGCTGGGAGCCGCTGCACGCCGCGGCCTACTGGGGCCAGGTGCCCTTGGTGGAG
CTGCTCGTGCGCGACGGGGCCGACCTGAACGCAAAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXGAGGTGCGGGCCAAGCTTCTGGAAGTGAACACAAGCACGACGCCCTCCTGCGCGCCCAGAGCCGCCAGCGC
TCCTTGCTGCGCGCGCCGACCTCCAGCGCCGGCAGCCGCGGGAAGGTGGTGAGGCGGGTGAGCCTAACCCAGCGC
ACCGACCTGTACCGCAAGCAGCACGCCCAGGAGGCCATCGTGTGGCAACAGCCGCCGCCACCAGCCCGAGCCG
CCCAGGACAACGATGACCGCCAGACAGGCGCAGAGCTCAGGCCGCCGCCCGGAGGAGGACAACCCGAAGTG
GTCAGGCCGCAATGGCCGAGTAGGGGGCTCCCCAGTGCGGCATCTATACTCCAAGCGACTAGACCGGAGTGTC
TCCTACCAGCTGAGCCCCCTGGACAGCACACCCCCACACCCTGGTCCACGACAAGGCCACCACACCCTGGCT
GACCTGAAGCGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCCCACCTGAGGGGGCCGAGAGCCCTGAGACAGCT
GAGCCTGGCCTGCCTGGTGACACGGTGACCCCCAGCCTGACTGTGGCTTCAGGGCAGGCGGGGACCCACCCCTG
CTAAGCTCACAGCCCCGGCGGTGGAGGCTCCCGTGGAGAGGAGGCCGTGCTGCCTGCTCATGTGAGGCTGTTGC
TCAGCATGCAGGGGCCCTGTCTCGGGCACAGCCCAAGGCTGCCTCCCCACGGTGCGTGCCCTGGTGCTGCGGGTG
CAGCACGGAAACCCCGGCTTCTACTGTACAGGACACTGGCCCCTCTCAGGTGAGAAGACATGCCTGGAGGGATGT
CTGGCTGCAAAGACTATTTTTATCCTGCAACTCTTGATAAAGGGCTGTTTTGCCATGG

WO 2004/030615

PCT/US2003/028547

2850/6881
FIGURE 2628

GACCTGAAGCGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCCCACCTGAGGGGCCCAGAGCCCTGAGACAGCT
GAGCCTGGCCTGCCTGGTGACACGGTGACCCCCAGCCTGACTGTGGCTTCAGGGCAGGCGGGGACCCACCCCTG
CTCAAGCTCACAGCCCCACGGTGCGTGCCCTGGTGCTGCGGGTGCAGCACGGAACCCCGGCTTCTACTGTACAG
GACACTGGCCCCCTCTCAGGTCAGAAGACATGCCTGGAGGGATGTCTGGCTGCAAAGACTATTTTAA

WO 2004/030615

PCT/US2003/028547

2851/6881
FIGURE 2629

ATGGTCACCATGGAGCCCGGGTACCTGTTCTCTGGGTTCTCGCCTGGGCAATTCCTCCTCCTCAAGTACACGGAG
AAGCTGCAGGAGCCCCCGGCCAGTGTGTCCGTGAGGCTGCCGACAAGGAAGAGCCTCCCTCAAAGAAGAAGCGA
GTGGATGCGACGGCCGGCTGGTCAGCTGCGGGTAAGTCGGTGCCGAGGATGAGGTGGACGAGATTGAAGTGTAC
GGCAGCGAGGCCAGTCCGGGAACACAGCTGGCCACCTACTCCTTTGAGGTGTGTGACAGCATCCTGAACATTGGA
CCCTGTGCCAATGCCGCCGTGGGCGAACCTGCCTTCTCTCTAAAGAGTTTCAGAACAGCCCCGAGCCGGACCTG
GAGATTGTGGTTTGTCTCCGGCCACGGGAAGAACGGGGCTTTGTCTGGTGTGTGAGAAGAGCATCCGGCCCCAGGTG
GTGACAACATTTGAGCTTCCCGGCTGCTATGACATGTGGACAGTCATCGCCCCGGTGCCTAAGGAGGAGGAGGAC
AATCCCAAGGGGGAGGGCACAGAGCAGGAACCCAGCACCACCCCTGAAGCAGACGACGACGGCCGACAGACACGGA
TTCCTGATTCTGAGCCGGGAAGACTCCACCATGATCCTGCAGACGGGGCAGGAGATCATGGAGCTGGACACCAGT
GGCTTCGCCACTCAGGGCCCCACGGTCTTTGCTGGGAACATCGGGGACAACCGCTACATTGTCCAAGTGTACCA
CTGGGCATCCGCTGTCTGGAAGGAGTGAATCAGCTGCACTTCATCCCCGTGGACCTGGGCGCCCCCATCGTGACG
TGCGCCGTGGCCGACCCCTATGTGGTCATCATGAGTGCCGAGGGCCACGTCACCATGTTCTGTCTGAAGAGTGAC
TCCTACGGTGGCCGCCACCACCGCTGGCGCTGCACAAGCCCCGCTGCACCATCAGTCCAAGGTGATTACGCTG
TGCCTGTACCGAGACCTCAGCGGCATGTTCACTAGAGCCGCCTGGGTGGGGCCCGTGACGAGCTCGGGGGC
CGCAGTGGCCCCGAGGGCCGAGGGCCTGGGCTCAGAGACTAGCCCCACAGTGGATGACGAGGAGGAGATGCTGTAT
GGGGATTCTGGGCTCCCTCTTCAGCCCCAGCAAGGAGGAGGCCGAAGAAGCAGCCAGCCCCCTGTGACCGGGAC
CCTGCACCCCTCCGGGCAGAGCCTACCCACTGGTGCCTGCTGGTGCGGGAGAATGGCACCATGGAGATCTACCAG
CTTCCCGACTGGCGGCTGGTGTCTCTGGTGAAGAACTTCCCTGTGGGGCAGCGGGTCTTGTGGACAGCTCCTTT
GGACAGCCCACTACACAGGGCGAGGGCCGAGGGAGGAGGCCACGCGCCAGGGGGAGCTGCCCTCGTCAAGGAG
GTGCTGTCTGGTGGCGCTGGGCAGCCGCCAGAGCAGGCCCTACCTGCTGGTGCATGTGGACCAAGAGCTGCTTATC
TACGAGGCCTTCCCCACGACTCTCAGCTCGGCCAGGGCAATCTCAAAGTCCGCTTTAAGAAGGTCCCTCACAAC
ATCAACTTCCGTGAGAAGAAGCCAAAGCCATCCAAGAAGAAAGCAGAAGGTGGCGGCGCAGAGGAGGGGGCTGGG
GCCCCGGGCTCGTGGCGCGTTTCCGCTACTTCGAGGATATTTATGGCTACTCAGGGGTCTTCATCTGCGGCCCC
TCCCTCACTGGCTCTTGGTGACCGGCCGAGGGGCTCTGCGGCTACACCCCATGGCCATCGACGGCCCCGGTGCAC
TCTTTGCTCCATTCCACAATGTCAACTGTCCCCGCGGCTTCTGTACTTCAACAGACAGGGCGAGCTGAGGATC
AGTGTCTCTGCCTGCCTACCTGTCTATGATGCCCCATGGCCTGTCAGGAAGATCCCGCAGCGTTGCACGGCCAC
TATGTGGCTTACCACGTGGAGTTTAAGGTGTATGCTGTGGCCACCAGCACCACACGCCGTGTGCCCGCATCCCCA
CGCATGACTGGCGAGGAGAAGGAGTTTGAGACCATCGAGAGAGATGAGCGGTACATCCACCCCCAGCAGGAGGCC
TTCTCCATCCAGCTCATCTCCCGGTGAGCTGGGAGGCTATTCCCAATGCCAGGATCGAGCTGCAGGAGTGGGAG
CATGTGACCTGCATGAAGACAGTGTCTCTGCGCAGTGAGGAGACCGTGTGCGGCCCTCAAAGGCTACGTGGCCGCC
GGGACCTGCCCTCATGCAGGGGGAGGAGGTACGTGCCGAGGGCGGATCTTGATCATGGATGTGATTGAGGTGGTG
CCCGAGCCTGGCCAGCCCTTGACCAAGAACAAGTTCAAAGTCTTTACGAGAAGGAGCAGAAGGGGGCCCGTGACC
GCCCTGTGCCACTGCAATGGCCACCTGGTGTGCGCCATCGGCCAGAAGATTTCTGTGGAGCCTGCGGGCCAGC
GAGCTGACGGGCATGGCCTTCATCGACACGCAGCTCTACATACACCAGATGATCAGCGTCAAGAACTTCATCCTG
GCAGCCGACGTGATGAAGAGCATTTCGCTGCTGCGCTACCAGGAGGAAAGCAAGACGCTGAGCCTGGTGTGCGG
GATGCCAAGCCCTGGAGGTGTACAGCGTGGACTTCATGGTGGACAATGCCAGCTGGGTTTTCTGGTGTCTGAC
CGCGACCGCAACCTCATGGTGTACATGTACCTGCCGAAGCCAAGGAGAGTTTCGGGGGCATGCGCCTGCTGCGT
CGGGCAGACTTCCACGTGGGTGCCACGTGAACACGTTTGGAGGACCCCGTGCCGGGGGGCCACTGAAGGGCTC
AGCAAAAAGTCGGTCTGTGGGAGAATAAGCACATCAGTGGTTTGCCACCCTGGACGGCGGCATCGGGCTGCTG
CTGCCCATGCAGGAGAAGACCTACCGCGGCTGTGATGCTGCGAGACGCGCTGACCACCATGCTGCCACACCAC
GCCGGCCTCAACCCCCGCGCCTTCCGGATGCTGCAGCTGGACCGCCGACCCCTCCAGAATGCCGTGCGCAACGTG
CTGGATGGGGAGCTGCTCAACCGCTACCTGTACCTGAGCACCATGGAGCGCAGCGAGGTGACCAAGAAGATCGGC
ACCACACCAGACATAATCCTGGACGACTTGTGAGACGGACCGCTACCGCCCACTTCTAGCCCCGTGGATGC
CGTCACCACCAGCACACGGAACCTACCTCCACCCCTTTTTGTACAAAACACAAGGAAAAACATTTTTTG

WO 2004/030615

PCT/US2003/028547

2852/6881
FIGURE 2630

MYAVYKQAHPPGTGLEFSMYCNFFNNSERNLVVAGTSQLYVYRLNRDAEALTKNDRSTEGKAHREKLELAASFSTF
GNVMSMASVQLAGAKRDALLSFKDAKLSVVEYDPGTHDLKTLSSLHYFEEPELRDGFVQNVHTPRVRVDPDGRCA
AMLVYGTRLVVLPPFRRESLAEHEGLVGEGQRSSFLPSYIIDVRALDEKLLNIIDLQFLHGYEPTLLILFEPNQ
TWPGRVAVRQDTCISIVAISLNIQKVHPVIWSLTSLPFDCTQALAVPKPIGGVVVFVAVNSLLYLNQSVPPYGV
NSLTTGTTAFPLRTQEGVRITLDCAQATFISYDKMVISLKGGEIYVLTITDGMRSVRAFHFDAKAAASVLTSMV
TMEPGYLFLGSRGLGNSLLLKYTEKLQEPASAVREAADKEEPPSKKKRVDATAGWSAAGKSVPQDEVDEIEVYGS
EAQSGTQLATYSFEVCDASILNIGPCANAAVGEPAFLSKEFQNSPEPDLEIVVCSGHGKNGALSVLQKSIRPQVVT
TFELPGCYDMWTVIAPVRKEEEDNPKGEGTEQEPSTTPEADDDGRRHGFLILSREDSTMILQTGQEIMELDTSGF
ATQGPTVVFAGNIGDNRYIVQVSPLGIRLLEGVNQLHFIPVDLGAPIVQCAVADPYVIMSAEGHVTMFLKSDSY
GGRHRLALHKKPLHHQSKVITLCLYRDLSGMFTTESRLGGARDELGGRSGPEAEGLGSETSP TVDDEEEMLYGD
SGSLFSPSKEEARRSSQPPADRDPAFPRAEP THWCLLVRENGTMEIYQLPDWRLVFLVKNFPVQQRVLVDSSFGQ
PTTQGEARREEATRQGELPLVKEVLLVALGSRQSRPYLLVHVDQELLIYEAFPHDSQLGQGNLKVRFKKVPHNIN
FREKKPKPSKKKAEGGGAEEGAGARGLVARFRYFEDIYGYSGVFIGPSPHWLLVTGRGALRLHPMAIDGPVDSF
APFHNVCPRGFLYFNQGE LRISVLPAYLSYDAPWPVRKIPQRCTAHYVAYHVEFKVYAVATSTNTPCARIPRM
TGEEKEFETIERDERYIHPQQEAFSIQLISPVSWEAIPNARIELQEWHTCMKT VSLRSEETVSGLKGYVAAGT
CLMQGEEVTCRGRILIMDVIEVVPEPGQPLTKNFKVLYEKEQKGPVTALCHCNGHLVSAIGQKIFLWSLRASEL
TGMAFIDTQLYIHQMISVKNFILAADVMSISLLRYQEESKTL SLVSRDAKPLEVYSVDFMVDNAQLGFLVSDRD
RNLVMYMYLPEAKESFGGMRLRRADFHVGAVNTFWRTPCRGATEGLSKKSVVWENKHITWFATLDGGIGLLLP
MQEKT YRRLMLQNALTTMLPHHAGLNPRAFRMLHVDRTLQNAVRNVLDGELLNRYLYLSTMERSEVAKKIGTT
PDIILDDLLETDRVTAHF

WO 2004/030615

PCT/US2003/028547

2853/6881
FIGURE 2631

AATGGACGAGAGAGGCGGCCGTCCATTAGTTAGCGGCTCCGGAGCAACGCAGCCGTTGTCCTTGAGGCCGACGGG
CCTGACGCGGGCGGGTTGAACGCGCTGGTGAGGCGGTACCCGGGCTACGGCGGCCGGCAGGGGGCAGTGGCGGC
CGTTGTCTAGGGCCCCGAGGTGGGGCCGCGCGCCTCGGGCGCTACGAACCCGGCAGGCCCACGCTTGGCTGCGGC
CGGGTGCGGGCTGAGGCC**ATG**GGCGACCGCGGCAGCTCCCGGCGCCGGAGGACAGGGTCGCGGCCCTCGAGCCAC
GGCGGCGGCGGGCCTGCGGCGGCGGAAGAGGAGGTGCGGGACGCCGCTGCGGGCCCCGACGTGGGAGCCGCGGGG
GACGCGCCAGCCCCGGCCCCCAACAAGGACGGAGACGCCGGCGTGGGCAGCGGCCACTGGGAGCTGAGGTGCCAT
CGCCTGCAGGATTCTTTATTAGCTCTGACAGTGGCTTCAGCAACTACCGTGGCATCCTGAAGTGGTGTGTGGTG
ATGCTGATCTTGAGCAATGCCCGGTTATTTCTGGAGAACCTCATCAAGTATGGCATCCTGGTGGACCCCATCCAG
GTGGTTTCTCTGTTCCCTGAAGGATCCCTATAGCTGGCCCCGCCCATGCCTGGTTATTGCGGCCAATGTCTTTGCT
GTGGCTGCATTCCAGGTTGAGAAGCGCCTGGCGGTGGGTGCCCTGACGGAGCAGGCGGGACTGCTGCTGCACGTG
GCCAACCTGGCCACCATTCTGTGTTTCCCAGCGGCTGTGGTCTTACTGGTTGAGTCTATCACTCCAGTGGGCTCC
CTGCTGGCGCTGATGGCGCACACCATCCTCTTCCTCAAGCTCTTCTCCTACCGCGACGTCAACTCATGGTGCCGC
AGGGCCAGGGCCAAGGCTGCCTCTGCAGGGAAGAAGGCCAGCAGTGTGCTGCCCCGCACACCGTGAGCTACCCG
GACAACTGACCTACCGCGATCTCTACTACTTCCTCTTCGCCCCACCTTGTGCTACGAGCTCAACTTTCCCCGC
TCTCCCCGCATCCGGAAGCGCTTTCTGCTGCGACGGATCCTTGAGATGCTGTTCTTCACCCAGCTCCAGGTGGGG
CTGATCCAGCAGTGGATGGTCCCCACCATCCAGAACTCCATGAAGCCCTTCAAGGACATGGACTACTCACGCATC
ATCGAGCGCCTCCTGAAGCTGGCGGTCCCCAATCACCTCATCTGGCTCATCTTCTTCTACTGGCTCTTCCACTCC
TGCCTGAATGCCGTGGCTGAGCTCATGCAGTTTGAGAGACCGGGAGTTCTACCGGGACTGGTGGAACTCCGAGTCT
GTCACCTACTTCTGGCAGAACTGGAACATCCCTGTGCACAAGTGGTGATCAGACACTTCTACAAGCCCATGCTT
CGACGGGGCAGCAGCAAGTGGATGGCCAGGACAGGGGTGTTCTGGCCTCGGCCTTCTTCCACGAGTACCTGGTG
AGCGTCCCTCTGCGAATGTTCCGCTCTGGGCGTTACGGGCATGATGGCTCAGATCCCCTGGCCTGGTTTCGTG
GGCCGCTTTTTCCAGGGCAACTATGGCAACGCAGCTGTGTGGCTGTGCTCATCATCGGACAGCCAATAGCCGTC
CTCATGTACGTCCACGACTACTACGTGCTCAACTATGAGGCCCCAGCGGCAGAGGCC**TG**AGCTGCACCTGAGGGC
CTGGCTTCTCACTGCCACCTCACACCCGCTGCCAGAGCCCACCTCTCCTCCTAGGCCTCGAGTGCTGGGGATGGG
CCTGGCTGCACAGCATCCTCCTCTGGTCCCAGGGAGGCCTCTCTGCCCCTATGGGGCTCTGTCTGCACCCCTCA
GGGATGGCGACAGCAGGCCAGACACAGTCTGATGCCAGCTGGGAGTCTTGCTGACCCTGCCCCGGGTCCGAGGGT
GTCAATAAAGTGCTGTCCAGTG

WO 2004/030615

PCT/US2003/028547

2854/6881
FIGURE 2632

MGDRGSSRRRRRTGSRPSSHGGGGPAAAEVEVRDAAAGPDVGAAGDAPAPAPNKDGDAGVGSGHWELRCHRLQDSL
FSSDSGFSNYRGILNWCVVMLILSNARLFLENLIKYGILVDPIQVVSFLKDPYSWPAPCLVIAANVFAVAFAFQV
EKRLAVGALTEQAGLLLHVANLATILCFPAAVVLLVESITPVGSLALMAHTILFLKLSYRDVNSWCRRARAKA
ASAGKKASSAAAPHTVSYPDNLTyrDLYYFLFAPTLCYELNFRSPRIRKRFLLRRILEMLFFTQLQVGLIQQWM
VPTIQNSMKPFKDMDYSRIIERLLKLAVPNHLIWLIFFYWLFHSCNVAELMQFGDREFYRDWWNSESVTYFWQ
NWNIPVHKWCIRHFYKPMRLRGSSKWMARTGVFLASAFFHEYLVSVPLRMFRLWAFTGMMAQIPLAWFVGRFFQG
NYGNAAVWLSLIIGQPIAVLMYVHDYYVLNIEAPAAEA .

WO 2004/030615

PCT/US2003/028547

2856/6881

FIGURE 2634

MGRVIRGQRKGAGSVFRAHVKHRKGAARLRAVDFAERHGYIKGIVKDIIHDPGRGAPLAKVVFRDPYRFKKRTEL
FIAAEGIHTGQFVYCGKKAQLNIGNVLPVGTMPGEGTIVCCLEEKPGDRGKLARASGNYATVISHNPETKKTRVKL
PSGSKKVISSANRAVVGVVAGGGRIDKPILKAGRAYHKYKAKRNCWPRVRGVAMNPVEHPFGGGNHQHIGKPSTI
RRDAPAGRKVGGLIAARRTGRLRGTKTVQEKEN

WO 2004/030615

PCT/US2003/028547

2857/6881
FIGURE 2635

GCGGCATGGGCAGTATCCGCCGCCATCCTCTTCCGTGAGGCGCGCTGAGACCCGGACCGGCCCTCCTGAGAGGAT
GCCGGTGCGGGCGCCCGCGGAGAGGGACCCGTCGCCATGGGCCGTGTGATCCGTGGACAGAGGAAGGGCGCCGGG
TCTGTGTTCCGCGCGCACGTGAAGCACCGTAAAGGCGCTGCGCGCCTGCGCGCCGTGGATTTTCGCTGAGCGGCAC
GGCTACATCAAGGGCATCGTCAAGGACATCATCCACGACCCGGGCGCGGCGCGCCCTCGCCAAGGTGGTCTTC
CGGGATCCGTATCGGTTTAAAGAAGCGGACGGAGCTGTTCAATTGCCCGGAGGGCATTACACGGGGCCAGTTTGTG
TATTGCGGCAAGAAGGCCCAGCTCAACATTGGCAATGTGCTCCCTGTGGGCACCATGCCTGAGGGTACAATCGTG
TGCTGCCTGGAGGAGAAGCCTGGAGACCGTGGCAAGCTGGCCCGGGCATCAGGGAATATGCCACCGTTATCTCC
CACAACCCTGAGACCAAGAAGACCCGTGTGAAGCTGCCCTCCGGCTCCAAGAAGGTTATCTCCTCAGCCAACAGA
GCTGTGGTTGGTGTGGTGGCTGGAGGTGGCCGAATTGACAAACCCATCTTGAAGGCTGGCCGGGCGTACCACAAA
TATAAGGCAAAGAGGAACTGCTGGCCACGAGTACGGGGTGTGGCCATGAATCCTGTGGAGCATCCTTTTGGAGGT
GGCAACCACCAGCACATCGGCAAGCCCTCCACCATCCGCAGAGATGCCCTGCTGGCCGCAAAGTGGGTCTCATT
GCTGCCCGCCGGACTGGACGTCTCCGGGGAACCAAGACTGTGCAGGAGAAAGAGAACTAGTGCTGAGGGCCTCAA
TAAAGTTTGTGTTTATGCCAAA

WO 2004/030615

PCT/US2003/028547

2858/6881
FIGURE 2636

MGRVIRGQRKGAGSVFRAHVKHRKGAARLRAVDFAERHGYIKGIVKDI IHDPGRGAPLAKVVFRDPYRFKKRTEL
FIAAEGIHTGQFVYCGKKAQLNIGNVLPVGTMPGTTIVCCLEEKPGDRGKLARASGNYATVISHNPETKKTRVKL
PSGSKKVISSANRAVVGVVAGGGRIDKPILKAGRAYHKYKAKRNCWPRVRGVAMNPVEHPFGGGNHQHIGKPSTI
RRDAPAGRKVGLIAARRTGRLRGTKTVQEKEN

WO 2004/030615

PCT/US2003/028547

2859/6881
FIGURE 2637

CTGTCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAGGGCTGCGGGCCAC
GTGCAGCCTATTCGCTGCACTAACTGTGCCCAGATGCATGCCAAGGACAAGGCCATTAAGAAATTCGTCATTCTGA
AACATAGTGGAGGCCGAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TATGTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGTCCGC
AAGGACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTAAGGA
GCTGAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

WO 2004/030615

PCT/US2003/028547

2860/6881
FIGURE 2638

TTTTCTGGGGGCAGCAGCCGGGCTGAGAGGAGAGTGGCTGTCTACTCTCTCCGCCATGGCGTGTGTCCGCCCAC
TGATGTCGCTGTACTCCGAAAAGGGGGAGTCATCTGGCAAAAATGTCACTTAGCCCGCTGTATTCAAGGCTCCTA
TTCGACCAGACATCGTGAACTTTGTTCACACCAACTTGC GCAAAAACAACAGACAGCCCTACGCTGCCAGTGAAT
TAGCAGGTCATCGGACCAGCACTGAGTCTTGGGGTACTGGCAGAGCTGTGGCTCGAATCCCAGAGTTCGAGGTG
GTGGGACTCACCGCTCCGGCCAGGGTGCTTTTGAAAACATGTGTCGTGGAGGCCGAAGGTTTGACCAACCAAAA
CCTGGCGCCGTTGGCATCGTAGAGTGAACACAACCCAAAAACGGTATGCCATCTGTTCTGCCCTGGCTGCCTCAG
CCCTACCAGCACTGGTCATGTCTAAAGGTCATCGTATTGAGGAAGTTCCTGAACTTCCTTTGGTAGTCGAAGATA
AAGTTGAAGGCTACAGGAAGACCAAGGAAGCTGTTTTGCTCCTTAAGAACTTAAAGCCAGGAACGATATCAAAA
AGGTCTATGCCTCTCAGCGAATGAGAGCTGGCAAAGGCAAAATGAGAAACCGTCGCCGTATCCAGCGCAGGGGCC
CGTGCATCATCTATAATGAGGATAATGGTATCAAGGCCTTCAGAAACATCCCTGCAATTACTCTGCTTAATGTAA
GCAAGCTGACCATTTCGAAGCTTGCTCCTGGTGGGCACGTGGGACGTTTCTGCATTTGGACTGGAAGTGCTTTCC
GGAAGTTGGATGAATTGTATGGCACTTGGCGTAAAGCCGCTTCCCTCAAGAGTAACTACAATCTTCCCATGCACA
AGATGATTAATACAGATCTTAGCAGAATCTTGAAAAGCCAGAGATCCAAAGAGCCTTTCGGGCACCAAGCAAGA
AGATTCATCGCAGAGTCCTAAAGAAGAACCCACTGAAAACTTGAGAATCATGTTGAAGCTAAACCCATATGCAA
AGACCATGCGCCGGAACACCATTCCTTCGCCAGGCCAGGAATCACAAGCTCCGGATGGATAAGGCAGCTGCTGCTG
CAGCAGCACTAGAAGCCAAACCAGATGAGAAGGCGGCGGTTGCAGGCAAGAAGCCTGTGGTAGGTAAGAAAGGAA
AGAAGGCTGCTGTTGGTGTGAAGAAGCAGAAGAAGCCTCTGGTGGGAAAAAAGGCAGCAGCTACCAAGAAATCAG
CCCCTGAAAAGAAGCCTGCAGAAAAGAAACCTACTGTAGAGGAAAAGAAGCCTGCTGCATTAACTCTTAAATTTG
ATTATTCCATAAAGGTCAAATCATTGTGGACAGCTTCTTTTGAATAAAGACCTGATTATACAGGCAGTGAGAAAC
A

WO 2004/030615

PCT/US2003/028547

2861/6881
FIGURE 2639

MCRGGRRFAPTKTWRRWHRVNTTQKRYAICSALAASALPALVMSKGRHIEEVPELPLVVEDKVEGYRKTKEAVL
LLKKLKARNDIKKVYASQRM RAGKGKMRNRRRIQRRGPCIIYNEDNGIKAFRNIPAITLLNVSKLTISK LAPGGH
VGRFCIWTGSAFRKLDELYGTWRKAASLKSNNLPMHKMINTDLSRILKSPEIQRAFRAPSKKIHRRLKKNPLK
NLRIMLKLNPYAKTMRNTILRQARNHKL RMDKAAAAAAALEAKPDEKA AVAGKKPVVGKKGKAAVGVKKQKKP
LVGKAAATKKSAP EKKPAEKKPTVEEKKPAALTLKFDYSIKVKS LWTASFE

WO 2004/030615

PCT/US2003/028547

2862/6881

FIGURE 2640

CTGAGTCTTGGGGTACTGGCAGAGCTGTGGCTCGAATTCCCAGAGTTCGAGGTGGTGGGACTCACCGCTCCGGCC
AGGGTGCTTTTGGAAACATGTGTCTGTGGAGGCCGAAGGTTTGCACCAACCAAAACCTGGCGCCGTTGGCATCGTA
GAGTGAACACAACCCAAAAACGGTATGCCATCTGTTCTGCCCTGGCTGCCTCAGCCCTACCAGCACTGGTCATGT
CTAAAGGTCATCGTATTGAGGAAGTTCCTGAACTTCCTTTGGTAGTCGAAGATAAAGTTGAAGGCTACAGGAAGA
CCAAGGAAGCTGTTTTGCTCCTTAAGAAATCAGCCCTGAAAAGAAGCCTGCAGAAAAGAAACCTACTGTAGAGG
AAAAGAAGCCTGCTGCATTAACCTCTTAAATTTGATTATTCATAAAGGTCAAATCATTGTGGACAGCTTCTTTG
AATAAAGACCTGATTATACAGGCAGTGAG

WO 2004/030615

PCT/US2003/028547

2863/6881
FIGURE 2641

AGAGCTGTGGCTCGAATTCAGAGTTTCGAGGTGGTGGGACTCACCGCTCCGGCCAGGGTGCTTTTGGAACATG
TGTCGTGGAGGCCGAAGGTTTGCACCAACCAAAACCTGGCGCCGTTGGCATCGTAGAGTGAACACAACCCAAAAA
CGGTATGCCATCTGTTCTGCCCTGGCTGCCTCAGCCCTACCAGCACTGGTCATGTCTAAAGGTCATCGTATTGAG
GAAGTTCCTGAACCTTCCTTTGGTAGTCGAAGATAAAGTTGAAGGCTACAGGAAGACCAAGGAAGCTGTTTTGCTC
CTTAAGAACTTAAAGCCAGGAACGATATCAAAAAGGCAGCAGCTACCAAGAAATCAGCCCCTGAAAAGAAGCCT
GCAGAAAAGAAACCTACTGTAGAGGAAAAGAAGCCTGCTGCATTAACCTTAAATTTGATTATTCATAAAGGTC
AAATCATTGTGGACAGCTTCTTTTGAATAAAGACCTGATTATACAGGC

WO 2004/030615

PCT/US2003/028547

2864/6881
FIGURE 2642

AGTGGCGGTGTCTGTGATGGTCCGGAGCGAGGCCTCGGCCAATCTGGGTGGCGTGCCAGCGAGATTAAAGATGC
AGTACGCCACGGGGCCACTGCTCAAGTTCCAGATTTGTGTTTCCTGAGGTTATAGGCGGGTGTTTGAGGAGTACA
TGTGGGTACTAGCCAGGGGTACCCAGACATCCGTATTGAAGGAGAGAATTACCTCCCTCAACCAATGTATAGAC
ACATAGCATCTTTCTGTGTCAGTCTTCAAAC TAGTATTAATAGGCTTAATAATTGTTGGCAAGGATCCTTTTGCTT
TCTTTGGCATGCAAGCTCCTAGCATCTGGCAGTGGGGCCAAGAAAATAAGGTCTATGCATGTATGATGGTTTTCT
TCTTGAGCAACATGATTGAGAACCAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCTGTGT
GGTCTAAGCTGGAATCCGGTCACCTTCCATCCATGCAACAGCTTGTTCAAATTCCTTGACAATGAAATGAAGCTCA
ATGTGCATATGGATTCAATCCACACCATCGATCATAGCACCACCTATCAGCACTGAAAAC TCTTTTGCATTAAG
GGATCATTCCAAGAGCAGCTTGACTGACATTATGAAGGCCTGTACTGAAGAGAGCAAGCTGTTAGTACAGACCAA
ATGCTTTCTTAGCATGCTCGTTGTACCTCTTGGAACCTCAATGCAAGATAGCTTTCCGTGCTGGCATATTTT
GGAATTCCTCACATTCATGGAGTGCAATAATACTGTATAGCTTTCCCCACCCCCACACAATCACCAGTTAATG
TGTGTTTTTTTTTAAGGTAGACATTACTACTTGTAAC TTTTTCTTAGTCGTATTTGAAAAAGTAGAAAATTGA
GTTACAATTTGATTTTTTTTCCAAAGATGTCTGTTAAATCTGTTGTGCTTTTATATGAATATTTGTTTTTTATAG
TTTAAAATTCATCCTTTGGGAATCCAGTTGAAGTTCCCAAATACTTTATAAGAGTTTATCAGACATCTCTAATTT
GGCCATGTCCAGTTTATATAGTTTACAAAATACAGCAGATGCAAGATTATGGGGGAAATCCTATATTCAGAGTAC
TCTACAAATTTTTGTGTATGTGTGTATGTGCGTGTGATTACCAGAGAACTACTAAAAAAACCAACTGCTTTTTAA
ATCCTATTGTGTAGTTCAAGTGTGATGCCTTGACCAATCTAATGAATTGATTAATTAAC TGGGCCTTTTACTTA
ACTAAATAAAAAACTAAGCAGATATGAGTT

WO 2004/030615

PCT/US2003/028547

2865/6881
FIGURE 2643

CSTPRGHCSSSRFVFPEGYRRVFEEYMWVTSQGYPDIRIEGENYLPQPMYRHIAFSLSVFKLVLIIGLIIVGKDPF
AFFGMQAPSIWQWGQENKVYACMMVFFLSNMIENQCMSTGAFEITLNDVPVWSKLESGHLPSMQQLVQILDNEMK
LNVHMDSIPHRS

WO 2004/030615

PCT/US2003/028547

2866/6881
FIGURE 2644

AGTGGCGGTGCTGTGATGGTCCGGAGCGAGGCCTCGGCCAATCTGGGTGGCGTGCCAGCGAGATTAAAGATGC
AGTACGCCACGGGGCCACTGCTCAAGTTCCAGATTTGTGTTTCCTGAGGTTATAGGCGGGTGTTTGAGGAGTACA
TGTGGGTTACTAGCCAGGGGTACCCAGACATCCGTATTGAAGGAGAGAATTACCTCCCTCAACCAATGTATAGAC
ACATAGCATCTTTCCTGTCAGTCTTCAAAGTAGTATTAATAGGCTTAATAATTGTTGGCAAGGATCCTTTTGCTT
TCTTTGGCATGCAAGCTCCTAGCATCTGGCAGTGGGGCCAAGACCAGTGTATGTCAACAGGTGCATTTGAGATAA
CTTTAAATGATGTACCTGTGTGGTCTAAGCTGGAATCCGGTCACCTTCCATCCATGCAACAGCTTGTTCAAATTC
TTGACAATGAAATGAAGCTCAATGTGCATATGGATTCAATCCCACACCATCGATCATAGCACCACCT

WO 2004/030615

PCT/US2003/028547

2867/6881
FIGURE 2645

GGGAGATTAAACCTTGGATTCTAGGTGGTAGAGGATAATTTTTTTTTGAATGAATTTCTTTTTATTTATTTATT
TATTTTTTTTCTTTTTAGGATAGAATTTTTGCGGCATTTGAAGAGCTTTTCCAGATTATGTTTAAAATTGAAAC
CAAGCCATGTGGTGAAGAACTCAAGGGTGGGGATAAAGTGCTGATGACCTGTGTTGGCATTGGTTTCTCCAACCT
TAGCAAGACCCTCAAGTGATAACCATCACAAGATAAGGCCCAATGCCTACAGACAAAGCAGAAGCTGCCACGGA
CACCAATGGGACCAAGTCCAAATGGATTAATCCAGGACAGAATAGCCACTTGCTTAATTTTCTGTGAAGAAATAT
CAATATACAAATAAAAGACATCCCTGTAGCATATGGTTTCCAGCTGTTTCTCCAGTGGCATTGCCATTGCCCAGG
AGGGGCCCCAGTCAACATGAGAGCTCCCTTGCCCTTACCTGGAGGAAGAATGTGCCTTCAGGCCACAGTCGTGCTGC
TAGAACAGTCTCGTAGCTGCAGTTAGCTGTGCTTCCTCAGCCTACTATCATAGGCTTCCTCAGCCCTCTGTCAT
ATGGCTGTTTTGCAAACCTGTGGAGTCTGTTACTGTTCTTTCTGCAAGGACTCACCTCCTTGAGCCTTGGTTTTT
GTTGTAGGGATTAAATGAGATAATATGAGTGGCAGCTCTTCATGAGTCCTGCAGTGCTAAGCAAATGTCAGAAAT
TGGTGTATTAGACTATTTATCTTTGATCTTCTGAATGGATTGCTGTCATGGACACGGACACGGATCTTCATCTGG
TTCATTGTATTTATATGTGAGGGATGGATGGCTGCGGGGCTCCAAGAGCAGCCTCCTGAAGTGAGGGTGGCAAGT
ATGTGACAGGGCACCCACAAAGGCAGACAAGGACTCTGAGAACCAACAGGACTTCTCTGGTCTTATTCTGAGGCT
AAGACAAAACCGCACCTGAGCCAGATCTCTCAGCCTGGCAGCTCCAGGACCCGTGGGCCCTGCCACTGGCCCAT
CTCAACGGCTAGGACCTAGAGCATCATCAAGCTGCAGGTTAAACAGGTTGGTTGGTTCTGATTTGACTGCACCTC
TACAAGGACCTATGGCTGCACTTGTTGATACTTTCCCGAGGAGCCACAACACTGAGCAATGAGGGGAGGAGCATG
TGTTAGTTCATTCAAGTCCTAAATGTTAACTACTATGTGCCAGGTGCTGAGCCAGGCACCAGAGATACCATG
ATGAACAAGACACATAAATCTTACCCTCATTGAGCTTACACCATGTGAAAGAGAAGTATGAAATAATTATACGTT
ATTTTTTTTTTAGTTTTTGAGATGGAGTTTCACTTTTGTCCCCAGGCTGGAGTGCGGTGGTGTGACCTCAGCTCA
CTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCACCTG
CCACCATGCCTGGCTAAATTTGTATTTTTAGTAGAGACGGGCTTTCACCATGTTGGTCAGGCTAGTCTTGAAC
CTGGCCTCAGGTGATCCTCCCACCTTGGCCTCCCAAAGTGCTGGGATTGCAGGCGTGAGCCACGGCACCTCACA
AATTACACATTATTCAACTGTAAGTGATTCTAAGGAAAAAGTACAGAGAGCTGTGGGAAAACATAAT
AGGAAATCTTTGTCACTTCTGTCACTATTGTCTATTAGGCTGTCACTGTTGTCACTTGTACCCCTACCCCTCTCGCA
GAGAGTGGTTCCCATTTGCCAGAGCTCATTTATTGTCTGAAAGTCTGTGAAAAGATGACAAAGTCGTGTTGCC
TCTTTCCACTTTCCCAAGTCTCACGTGAGCACCCCTAACTGGCAGAATCAATTCACACCCACAAGCCTAGCTGCA
AGGGGACCTGGGAAATGTATTCCCAGCTTTCCAACCTCTCCACCCAGGAGATGAAACAGCCAATTTAGGCCAGGT
GCAATGGCTTACACATGTAAAACCAGCACTATGGGAGGCTGAGGAGGGAAGATTACTTGAGCCCAGGAGTTTGAG
ACCAGCCTGGACAACAGGGCGAGACCATCATCTTACAAAAAATACAAAAAAATTAGCTAGGCGTGGTGTCTCTG
TGCCTGTGGTCCCAGCTCCTCAGGAGGCTGAGGCAGGAGGATCGCTTGAGATCGAGGCTGCAGTGAGCCGTGATC
GCGCCACTGCACTCCAGTCTGGGTGACAGCGAGACCCTATCTCAAAAAAG

WO 2004/030615

PCT/US2003/028547

2868/6881
FIGURE 2646

CTCAGCTACGCAGGGTGCAACTTCTTGCGCCAACGTCTGGTCCTGTCTACCCTGAGCGGGCGCCCCGTCAAAATC
CGAAAGATTCTGGGCCAGAGACGACAACCCGGGCCTCCGAGATTTTGAAGCCAGCTTCATAAGGCTATTGGACAAA
ATAACGAATGGTTCTCGAATTGAAATAAACCAAACAGGAACAACCTTATATTATCAGCCTGGCCTCCTGTATGGT
GGATCTGTGGAACATGACTGTAGCGTCCTTCGTGGCATTGGGTATTACCTGGAGAGTCTTCTTTGCTTGGCTCCA
TTTATGAAGCACCCGTTAAAAATAGTTCTACGAGGAGTGACCAATGATCAGGTTGACCCTTCAGTTGATGTTCTT
AAGGCAACAGCACTCCCTTTGTTGAAACAATTTGGGATTGATGGTGAATCATTGAACTGAAGATTGTGCGACGG
GGAATGCCTCCCGGAGGAGGAGGCGAAGTGGTTTTCTCATGTCTGTGAGGAAGGTCTTGAAGCCATTCAACTC
ACAGATCCAGGAAAAATCAAACGTATTAGAGGAATGGCGTACTCTGTACGTGTGTACCTCAGATGGCGAACCGG
ATTGTGGATTCTGCAAGGAGCATCCTCAACAAGTTCATACCTGATATCTATATTTACACAGATCACATGAAAGGA
GTCAACTCTGGGAAGTCTCCGGGCTTTGGGTTGTCACTGGTTGCTGAGACCACCAGTGGCACCTTCCTCAGTGCT
GAACTGGCCTCCAACCCCCAGGGCCAGGGAGCAGCAGTACTTCCAGAGGACCTTGGCAGGAACGTGCCCCGGCTG
CTGCTGGAGGAAATCTACAGGGGTGGATGCGTAGACTCGACCAACCAAAGCCTGGCGCTACTACTCATGACCCTT
GGACAGCAGGATGTTTCAAAGTCCTGCTAGGCCCTCTCTCTCCCTACACGATAGAATTTTTGCGGCATTTGAAG
AGCTTTTTCCAGATTATGTTTAAAATTGAAACCAAGCCATGTGGTGAAGAACTCAAGGGTGGGGATAAAGTGCTG
ATGACCTGTGTTGGCATTGGTTTCTCCAACCTTAGCAAGACCCTCAAGTGATAACCATCACAAAGATAAGGCCCCA
ATGCCTACAGACAAAGCAGAAGCTGCCACGGACACCAATGGGACCAAGTCCAAATGGATTAATCCAGGACAGAAT
AGCCACTTGCTTAATTTTCTGTGAAGAAATATCAATATACAAATAAAAGACATCCCTGTAGCATATGGTTTCCAG
CTGTTTCTCCAGTGGCATTGCCATTGCCCAGGAGGGGGCCAGTCACCATGAGAGCTCCCTTGCCTTACCTGGAGG
AAGAATGTGCCTTCAGGCCACAGTCGTGCTGCTAGAACAGTCTCGTAGCTGCAGTTCAGCTGTGCTTCCTCAGCC
TACTATCATAGGCTTCCTCAGCCCTCTGTCTATATGGCTGTTTTGCAAACCTGTGGAGTCTGTTACTGTTCTTTCT
GCAAGGACTCACCTCCTTGAGCCTTGGGTTTTTGTGTAGGGATTAAATGAGATAATATGAGTGGCAGCTCTTCAT
GAGTCCTGCAGTGCTAAGCAAATGTGAGAAATTGGTGTATTAGACTATTTATCTTTGATCTTCTGAATGGATTGC
TGTCATGGACACGGACACGGATCTTCATCTGGTTTATTGATTTATATGTGAGGGATGGATGGCTGCGGGGCTCC
AAGTAAGTTATTGGGATGTTTTTATATCCAGGTGTGCTGTACATTCCTATTTTATTTTACAAATAGCTCTGTGA
TGTAAGTGCTATCTCCATGAGAAAATTCATAAAGGGTGTTTTGTTCCCTTGAAATGTATAATGTAAAGACATTAA
ATCTCCTCATTTA

WO 2004/030615

PCT/US2003/028547

2869/6881
FIGURE 2647

CGCCGCAGCTCCAGCGCCGCGCAGCAGCCGCCGCCGCCCTCTCCTTAGTCACTGCCATGACGACCGCGTCCAC
CTCGCAGGTGCGCCAGAACTACCACCAGGACTCAGAGGCCGCCATCAACCGCCAGATCAACCTGGAGCTCTACAC
CTCCTACCTTTACCTGTCCACGTCTTACTACTTTGACCTCGATGATGTGGCTTTGAAGAACTTTGCCAAATACTT
TCTTCACCAATCTCATGAGGAGAGGGAACATGCTGAGAACTGTTGAAGCTGCAGAACCAACGAGGTGGCCGAAT
CCTTCTTCAGGATATCAAGAAACCAGACTGTGATGACTGGGAGAGTGGGCTGAATGCGATGGAGTGTGCACTACA
TTTGGAATAAATGTGTATCAGTCACCACTGGAAGTGCACAAACCGGCCACTGACAAAAATGCCATCAAAGAATG
GGGTGACCACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTTGGCAGAATATCTCTTTGACAAGCA
CTCCCTGGGAGACAGTGATAATGAAAGCTTAAGCCTCAGGCTAATTTCCCCATAGCCGTGGGGTGACTTCCCTGGT
CACCAAGGCAGTGCATGCATGTTGGG

WO 2004/030615

PCT/US2003/028547

2870/6881
FIGURE 2648

MTTASTSQVRQNYHQDSEAAINRQINLELYTSYLYLSTSYFFDLDDVALKNFAKYFLHQSHEEREHAEKLLKLQN
QRGGRILLQDIKKPDCDDWESGLNAMECALHLEKNVYQSPLLELHKPATDKNAIKEWGDHVTNLCKMGAPESGLAE
YLFDKHSLGSDNES

WO 2004/030615

PCT/US2003/028547

2871/6881
FIGURE 2649

ATGGCATCCGTTGCAGTTGATCCACAACCGAGTGTGGTGACTCGGGTGGTCAACCTGCCCTTGGTGAGCTCCACG
TATGACCTCATGTCTCAGCCTATCTCAGTACAAAGGACCAGTATCCCTACCTGAAGTCTGTGTGTGAGATGGCA
GAGAACGGTGTGAAGACCATCACCTCCGTGGCCATGACCAGTGCTCTGCCCATCATCCAGAAGCTAGAGCCGCAA
ATTGCAGTTGCCAATACCTATGCCTGTAAGGGGCTAGACAGGATTGAGGAGAGACTGCCTATTCTGAATCAGCCA
TCAACTCAGATTGTTGCCAATGCCAAAGGCGCTGTGACTGGGGCAAAGATGCTGTGACGACTACTGTGACTGGG
GCCAAGGATTCTGTGGCCAGCAGCATCACAGGGGTGATGGACAAGACCAAAGGGGCAGTGACTGGCAGTGTGGAG
AAGACCAAGTCTGTGGTCAGTGGCAGCATTAACACAGTCTTGGGGAGTCGGATGATGCAGCTCGTGAGCAGTGGC
GTAGAAAATGCACTCACCAAATCAGAGCTGTTGGTAGAACAGTACCTCCCTCTCACTGAGGAAGAACTAGAAAAA
GAAGCAAAAAAAGTTGAAGGATTTGATCTGGTTCAGAAGCCAAGTTATTATGTTAGACTGGGATCCCTGTCTACC
AAGCTTCACTCCCGTGCCTACCAGCAGGCTCTCAGCAGGGTTAAAGAAGCTAAGCAAAAAAGCCAACAGACCATT
TCTCAGCTCCATTCTACTGTTACCTGATTGAATTTGCCAGGAAGAATGTGTATAGTGCCAATCAGAAAATTCAG
GATGCTCAGGATAAGCTCTACCTCTCATGGGTAGAGTGGAAAAGGAGCATTGGATATGATGATACTGATGAGTCC
CACTGTGCTGAGCAATTTGAGTCACGTACTCTTGCAATTGCCCGCAACCTGACTCAGCAGCTCCAGACCACGTGC
CACACCCTCCTGTCCAACATCCAAGGTGTACCACAGAACATCCAAGATCAAGCCAAGCACATGGGGGTGATGGCA
GGCGACATCTACTCAGTGTTCCGCAATGCTGCCTCCTTTAAAGAAGTGTCTGACAGCCTCCTCACTTCTAGCAAG
GGGCAGCTGCAGAAAATGAAGGAATCTTTAGATGACGTGATGGATTATCTTGTTAAACAACACGCCCCCTCAACTGG
CTGGTAGGTCCCTTTTATCCTCAGCTGACTGAGTCTCAGAATGCTCAGGACCAAGGTGCAGAGATGGACAAGAGC
AGCCAGGAGACCCAGCGATCTGAGCATAAAACTCATTAA

WO 2004/030615

PCT/US2003/028547

2872/6881
FIGURE 2650

MASVAVDPQPSVVTRVVNLPLVSSTYDLMSSAYLSTKDQYPYLKSVCEMAENGVKTTITSVAMTSALPIIQKLEPQ
IAVANTYACKGLDRIEERLPILNQ PSTQIVANAKGAVTGAKDAVTTTGTGAKDSVASTITGVMDKTKGAVTGSVE
KTKSVVSGSINTVLGSRMMQLVSSGVENALTKSELLVEQYLPLTEEELEKEAKKVEGFDLVQKPSYYVRLGSLST
KLHSRAYQQALSRVKEAKQKSQQTISQLHSTVHLIEFARKNVYSANQKIQDAQDKLYLSWVEWKRSIGYDDTDES
HCAEQFESRTLAIARNLTQQLQTTCHTLLSNIQGV PQNIQDQAKHMGVMAGDIYSVFRNAASFKEVSDSLLTSSK
GQLQKMKESLDDVMDYLVNNTPLNWLVGPFYPQLTESQNAQDQGAEMDKSSQETQRSEHKTH

WO 2004/030615

PCT/US2003/028547

2873/6881
FIGURE 2651

CCTCTTTTCCGTGGCGCCTCGGAGGCGTTTCAGCTGCTTCAAGATGAAGCTGAACATCTCCTTCCCAGCCACTGGC
TGCCAGAACTCATTGAAGTGGACGATGAACGCAAACCTTCGTACTTTCTATGAGAAGCGTATGGCCACAGAAGTT
GCTGCTGACGCTCTGGGTGAAGAATGGAAGGGTTATGTGGTCCGAATCAGTGGTGGGAACGACAAACAAGGTTTC
CCCATGAAGCAGGGTGTCTTGACCCATGGCCGTGTCCGCCTGCTACTGAGTAAGGGGCATTCTGTACAGACCA
AGGAGAACTGGAGAAAGAAAGAGAAAATCAGTTCGTGGTTGCATTGTGGATGCAAATCTGAGCGTTCTCAACTTG
GTTATTGTAAAAAAGGAGAGAAGGATATTCTGGACTGACTGATACTACAGTGCCTCGCCGCCTGGGCCCCAAA
AGAGCTAGCAGAATCCGCAAACCTTTTCAATCTCTCTAAAGAAGATGATGTCCGCCAGTATGTTGTAAGAAAGCCC
TTAAATAAAGAAGGTAAGAAACCTAGGACCAAAGCACCCAAGATTCAGCGTCTTGTTACTCCACGTGTCCTGCAG
CACAAACGGCGGCGTATTGCTCTGAAGAAGCAGCGTACCAAGAAAAATAAAGAAGAGGCTGCAGAATATGCTAAA
CTTTTGGCCAAGAGAATGAAGGAGGCTAAGGAGAAGCGCCAGGAACAAATTGCGAAGAGACGCAGACTTTCCTCT
CTGCGAGCTTCTACTTCTAAGTCTGAATCCAGTCAGAAAATAAGATTTTTTGAGTAACAAATAAATAAGATCAGAC
TCTG

WO 2004/030615

PCT/US2003/028547

2874/6881
FIGURE 2652

MKLNISFPATGCQKLI EVDDERKLRTFYEKRMATEVAADALGEEWKGYVVRISGGNDKQGFPKQGVLT HGRVRL
LLSKGHSCYRPRRTGERKRKSVRGCIVDANLSVLNLVIVKKGEKDIPGLTDTTVPRRLGPKRASRIRKLFNLSKE
DDVRQYVVRKPLNKEGKKPRTKAPKIQRLVTPRVLQHKRRRI ALKKQRTKKNKEEAAEYAKLLAKRMKEAKEKRO
EQIAKRRRLSSLRASTSKSESSQK

PCT/US2003/028547

CTCTCCCTACGGGCGCCTCCGGCAGCCCTTCCCGCGTGCGCAGGGCTCAGAGCCGTTCCGAGATCTTTGGAGGTCCG
GGTGGGAGTGGGGGTGGGGTGGGGGTGGGGGTGAAGGTGGGGGGCGGGCGCGCTCAGGGAAGGCGGGTGCGCGCC
TGCGGGGCGGAGATCGGGCAGGGGGCGGTGCGTGGGTCCAGTCTGCAGTTAAGGGGGCAGGAGTGGCGCTGCTCA
CCTCTGGTGCCAAAGGGCGCGCAGCGGCTGCCGAGCTCGGCCCTGGAGGCGGCGAGAACATGGTGCAGAGTTT
TTGGTGACCTCCGGATTTCGGCGCGCGTGCGGCCCGCCGCGAGTGAGGGTTTTCTGGTTTACATCCCGCGGCTC
ACGGGGGAGTGGGCAGCGCCAGGGGCGCCCGCCGCTGTGCCCTCTGTGCTGATGCTACTGAGGAGCCAGCGTCTA
GGGCAGCAGCCGCTTCTAGAAAGACCAGGTCATGATGATGGGCAGCGCCGAGTGGCGGAGCTGCTGCTGCTCCA
CGGCGCGGAGCCAACTGCGCCGACCCCGCCACTCTACCCGACCCGTGCACGACGCTGCCCGGGAGGGCTTCTT
GGACACGCTGGTGGTGCTGCACCGGGCGGGGCGCGGCTGGACGTGCGCGATGCTTGGGGCCGCTCTGCCCGTGA
CCTGGCTGAGGAGCTGGGCCATCGCGATGTCGCACGGTACCTGCGCGCGGCTGCGGGGGGACCAGAGGCAGTAA
CCATGCCCGCATAGATGCCGCGGAAGTCCCTCAGACATCCCCGATTGAAAGAACCAGAGAGGCTCTGAGAAACC
TCGGGAAACTTAGATCATCAGTCACCGAAGGTCTACAGGGCCACAACCTGCCCCCGCCACAACCCACCCCGCTTT
CGTAGTTTTTCAATTTAGAAAATAGAGCTTTTAAAAATGTCTGCTTTTAAACGTAGATATATGCTTCCCCACTA
CCGTAAATGTCCATTTATATCATTTTTTATATATTCTTATAAAAAATGTAAAAAAGAAAAACACCGCTTCTGCCTT
TTCACTGTGTTGGAGTTTTCTGGAGTGAGCACTCACGCCCTAAGCGCACATTTCATGTGGGCATTTCTTGCAGACC
TCGCAGCCTCCGGAAGCTGTCGACTTCATGACAAGCATTTTGTGAAC TAGGGAAGCTCAGGGGGGTTACTGGCTT
CTCTTGAGTCACACTGCTAGCAAATGGCAGAACCAAAGCTCAAATAAAAAATAAAATAATTTTCATTCATTCACTC

WO 2004/030615

PCT/US2003/028547

2876/6881
FIGURE 2654

MGRGRCVGPSLQLRGQEWRCSP LVPKGGAAAAELGPGGGENMVRFLVTLRIRACGPPRVRFV VHIPRLTGEW
AAPGAPAAVALVLMLLRSQRLGQQPLPRRPGHDDGQRPSSGAAAAPRRGAQLRRPRHSHPTRARRCPGGLPGHAG
GAAPGRGAAGRARCLGPSARGPG

WO 2004/030615

PCT/US2003/028547

2877/6881
FIGURE 2655

CCCAACCTGGGGCGACTTCAGGTGTGCCACATTGCTAAGTGCTCGGAGTTAATAGCACCTCCTCCGAGCACTCG
CTCACGGCGTCCCCTTGCTGGAAAGATACCGCGGTCCCTCCAGAGGATTTGAGGGACAGGGTCGGAGGGGGCTC
TTCCGCCAGCACCGGAGGAAGAAAGAGGAGGGGCTGGCTGGTCACCAGAGGGTGGGGCGGACCGCGTGCGCTCGG
CGGCTGCGGAGAGGGGGAGAGCAGGCAGCGGGCGGGGAGCAGCATCGAGCCGGCGGGGAGCAGCATGGA
GCCTTCGGCTGACTGGCTGGCCACGGCCGCGGCCCGGGGTCTGGGTAGAGGAGGTGCGGGCGCTGCTGGAGGGCGG
GGCGCTGCCCCAACGCACCGAATAGTTACGGTCGGAGGCCGATCCAGGTCATGATGATGGGCAGCGCCCGAGTGGC
GGAGCTGCTGCTGCTCCACGGCGCGGAGCCCAACTGCGCCGACCCCGCCACTCTCACCCGACCCGTGCACGACGC
TGCCCCGGGAGGGCTTCCTGGACACGCTGGTGGTGTGTCACCGGGCCGGGGCGCGGCTGGACGTGCGCGATGCCTG
GGGCCGTCTGCCCCGTGGACCTGGCTGAGGAGCTGGGCCATCGCGATGTCGCACGGTACCTGCGCGCGGCTGCGGG
GGGCACCAGAGGCAGTAACCATGCCCCGATAGATGCCGCGGAAGGTCCCTCAGACATCCCCGATTGAAAGAACCA
GAGAGGCTCTGAGAAACCTCGGGAACTTAGATCATCAGTCACCGAAGGTCTACAGGGCCACAACCTGCCCCCGC
CACAACCCACCCCGCTTTCGTAGTTTTCATTTAGAAAATAGAGCTTTTAAAAATGTCCTGCCTTTTAACGTAGAT
ATATGCCTTCCCCCACTACCGTAAATGTCCATTTATATCATTTTTTATATATTCTTATAAAAAATGTAAAAAGAA
AAACACCGCTTCTGCCTTTTCACTGTGTTGGAGTTTTCTGGAGTGAGCACTCACGCCCTAAGCGCACATTCATGT
GGGCATTTCTTGCGAGCCTCGCAGCCTCCGGAAGCTGTCGACTTCATGACAAGCATTTTGTGAAC TAGGGAAGCT
CAGGGGGGTTACTGGCTTCTCTTGAGTCACACTGCTAGCAAATGGCAGAACCAAAGCTCAAATAAAAAATAAATA
ATTTTCATTCAATCACTC

WO 2004/030615

PCT/US2003/028547

2878/6881
FIGURE 2656

MEPAAGSSMEPSADWLATAAARGRVEEV RALLEAGALPNAPNSYGRRP IQVMMG SARVAELLLLHGAEPNCADP
ATLTRPVHDAAREGF LDTLVVLHRAGARLDVRDAWGRLPVDLAEELGHRDVARYLRAAAGGTRGSNHARIDAAEG
PSDIPD

WO 2004/030615

PCT/US2003/028547

2879/6881
FIGURE 2657

TGTGTGGGGGTCTGCTTGGCGGTGAGGGGGCTCTACACAAGCTTCCTTTCCGTGATGCCGGCCCCACCCTGGCT
CTGACCATTCTGTTCTCTCTGGCAGGTCATGATGATGGGCAGCGCCCGAGTGGCGGAGCTGCTGCTGCTCCACGG
CGCGGAGCCCAACTGCGCCGACCCCGCCACTCTCACCCGACCCGTGCACGACGCTGCCCGGGAGGGCTTCCTGGA
CACGCTGGTGGTGTGTCACCGGGCCGGGGCGCGGCTGGACGTGCGCGATGCCTGGGGCCGTCTGCCCGTGGACCT
GGCTGAGGAGCTGGGCCATCGCGATGTCGCACGGTACCTGCGCGCGGCTGCGGGGGGCACCAGAGGCAGTAACCA
TGCCCGCATAGATGCCGCGGAAGGTCCCTCAGACATCCCCGATTGAAAGAACCAGAGAGGCTCTGAGAAACCTCG
GGAAACTTAGATCATCAGTCACCGAAGGTCCCTACAGGGCCACAAGTCCCCCGCCACAACCCACCCCGCTTTCGT
AGTTTTCATTTAGAAAATAGAGCTTTTAAAAATGTCCTGCCTTTTAAACGTAGATATAAGCCTTCCCCACTACCG
TAAATGTCCATTTATATCATTTTTTATATATTCTTATAAAAAATGTAAAAAAGAAAAACACCGCTTCTGCCTTTTC
ACTGTGTTGGAGTTTTCTGGAGTGAGCACTCACGCCCTAAGCGCACATTATGTGGGCATTTCTTGCGAGCCTCG
CAGCCTCCGGAAGCTGTCGACTTCATGACAAGCATTTTGTGAACTAGGGAAGCTCAGGGGGGTACTGGCTTCTC
TTGAGTCACACTGCTAGCAAATGGCAGAACCAAAGCTCAAATAAAAAATAAAATAATTTTCATTCACTC

WO 2004/030615

PCT/US2003/028547

2880/6881
FIGURE 2658

MMGSGARVAELLLLHGAEPNCADPATLTRPVHDAAREGFLDTLVVLHRAGARLDVRDAWGRLPVDLAEELGHRDV
ARYLRAAAGGTRGSNHARIDAAEGPSDIPD

WO 2004/030615

PCT/US2003/028547

2881/6881
FIGURE 2659

GCAGTAGTGCTAGCGGCTTCACGGTTCGGTCCTCGGACCCGGCAGCCGCCACTGGTGCTGAGCTGTTAGGAAGCC
CCTATCGGCGAGCTCATTGGAGCTTGAACCCATTGTCACCCCTCCGACTCACCGGCAAAAAAAAAAAAAAAAAAAT
GGTTGAAGCAGATTGCCAGGAAAGCCGTTCACTGGTGGGCTTAACACGGAAACAAATGAGAAAGCTCTTGAAGC
AGTATTTGGCAAATATGGACGAATAGTGGAAGTACTCTTGGTGAAAGACCATGAAACCAACAAATCAGGAGGATT
TGCTTTTGTACCTTTGAAAGCCAGCAGATGCTAAGGATGCAGCCAGAGACATGAATGGAAAGTCATTAGATGG
AAAAGCCATCGAGGTGGAACAAGCCAACAAACCATCATTTGAAAGTGGTAGACGTGGACCGCCTCCACCTCCAAG
AAGTAGAGGCCCTCCAAGAGGTCTTAGAGGTGGAAGAGGAGGAAGTGGAGGAACAAGGGGACCTCCCTCACGGGG
AGGACACATGGATGACGGTGGATATTCCATGAATTTTAACATGAGTTCTTCCAGGGGACCACATCCAGTAAAAAG
AGGACCACCACCAAGAAGTGGGAGTCCTCCTTCTAAGAGATCTGCACCTTCAGGACCAGTTCGCAGTAGCAGTGA
AATGGGAGGAAGAGCTCCTGTATCAGTGGAAGAGATAGTTACGGAGGTCCACCTCGAAGGGAAGTGTGCCCTC
TTGTAGAAATGATTATTTGTCCCAAGAGATGATGGGTATTCTACTAAAGACAGCTATTCAAGCAGAGATTACCC
AAGTTCTCATGATACTAGAGCTTATGCACCACCACCACGAGATTATACTTACCGTGATTATGGTCATTCCAGTTC
ACGTGTTGACTATCCATAAAGAGGCTATAGCGATAGAGATAGATATGGTCGTGATCATGACTATTCAGATCATCC
AGGTGGAGGTTCTACAGAGATTATATGAGAGTTATGGTAACTCACGTAGTGCTCCACCTACACGAGGGCCCCC
ACCATCTTATGGTGGAAGCAGTCGCTATGATGATTACAGCAGCTCATGTGACGGATATGGTGGAAGTCGAGACAG
TACTCAAGCAGCCGAAGTGATCTCTACTCAAGTGGTCGTGATCGGGTTGGCAGACAAGAAAGAGGGCTTACCCC
TTCTATGGAAAGAGGATAACCTCCTCCACGTGATTCTACAGCAGTTCAAGTGCAGGAGCACCAGCGGTGGTGGC
TGTGGAGGAAGCCGATCTGATAGAGGGGGAGGTAGAAGCAGATACTAGAAACAAACAAAACCTTTGGACCAAAATC
CCAGTTCAAAGAAACAAAAAGTGAAGCTATTCTATCATAACTACCAAGGACTACTAAAAGGAAAAATTGTGTT
ACTTTTAAAAAATTCCCTGTAAAGTTCCCCCTCCATAATTTTTATGTTCTTGTGAGGAGAAAAGTAAACATGTTT
AATTTTATTTTGACTTTTGCATTGCTTTTCAACAAGCAAACGTTAAATGTGTTAAGACTTGTACTGGTGTGTAA
CTTTCCAAGTAAAAGTATCCCTAAAGGCCACTTCCTATCTGATTTTTTCCAGTAAATGAGGCAGGCAATTCTAAG
ATCTTCCACAAAACATCTAGCCATCTAAAATGGAGAGATGAATCATTCTACCTATACAAACAAGCTAGCTATTAG
AGGGTGGTTGGGGTATGCTACTCATAAGATTTCAAGGTGTCTTCCAAGTAAATCTCAATGTTTTTCAGTATGAAA
AACCTGAAATCACATGCCTTTGTAAAGGAAAGTGCTATTCACCCAGTAAACCCAAAAAAGCAAATGGATGATGCTG
GCCATTTGCCTTTCTGACATTTCTTGGGAATCTGCAAGAACCTCCCTTTCCCCCTCCCCCAATAAGACCATT
AAGTGTGTGTTAAACAACACTACAGAATACTAAATAAAAAGTTTGGCCAAAACC

WO 2004/030615

PCT/US2003/028547

2882/6881
FIGURE 2660

CGGTAAC TACCCCGGCTGCGCACAGCTCGGCGCTCCTTCCCGCTCCCTCACACACCCGCTCAGCCCGCACCGGCA
GTAGAAGATGGTGAAAGAAACAACCTTACTACGATGTTTTGGGGGTCAAACCCAATGCTACTCAGGAAGAATTGAA
AAAGGCTTATAGGAACTGGCCTTGAAGTACCATCCTGATAAGAACCCTAATGAAGGAGAGAAGTTTAAACAGAT
TTCTCAAGCTTACGAAGTTCTCTCTGATGCAAAGAAAAGGGAATTATATGACAAAGGAGGAGAACAGGCAATTAA
AGAGGGTGGAGCAGGTGGCGGTTTTGGCTCCCCATGGACATCTTTGATATGTTTTTTGGAGGAGGAGGAAGGAT
GCAGAGAGAAAGGAGAGGTAAAAATGTTGTACATCAGCTCTCAGTAACCCTAGAAGACTTATATAATGGTGCAAC
AAGAAAAC TGGCTCTGCAAAGAATGTGATTTGTGACAAATGTGAAGGTAGAGGAGGTAAAGAAAGGAGCAGTAGA
GTGCTGTCCCAATTGCCGAGGTACTGGAATGCAAATAAGAATTCATCAGATAGGACCTGGAATGGTTCAGCAAAT
TCAGTCTGTGTGCATGGAGTGCCAGGGCCATGGGGAGCGGATCAGTCCTAAAGATAGATGTAAAAGCTGCAACGG
AAGGAAGATAGTTGAGAGAAGAAAATTTTAGAAGTTCATATTGACAAAGGCATGAAAGATGGCCAGAAGATAAC
ATTCCATGGTGAAGGAGACCAAGAACCAGGACTGGAGCCAGGCGATATTATCATTGTGTAGATCAGAAGGACCA
TGCTGTTTTTACTCGACGAGGAGAAGACCTTTTCATGTGTATGGACATACAGCTCGTTGAAGCACTGTGTGGCTT
CCAGAAGCCAATATCTACTCTTGACAACCGAACCATCGTCATCACCTCTCATCCAGGTCAGATTGTCAAGCATGG
AGATATCAAGTGTGTACTAAATGAAGGCATGCCAATTTATCGTAGACCATATGAAAAGGGTCGCCTAATCATCGA
ATTTAAGGTAACTTTTCTGAGAATGGCTTTCTCTCTCCTGATAAACTGTCTTTGCTGGAAAACTCCTACCCGA
GAGGAAGGAAGTGGAAGAGACTGATGAGATGGACCAAGTAGAACTGGTGGACTTTGATCCAAATCAGGAAAGACG
GCGCCACTACAATGGAGAAGCATATGAGGATGATGAACATCATCCAGAGGTGGTGTTCAGTGTGACACCTCTTA
ATGGCCAGTGAATAACACTCACTGCTGGCATTTAATGTGCAGTAGTGAATGAGTGAAGGACTGTAATCATAATAT
GCTCACTACTTGCTCTTGTTTTTGTGTTTTAATAAACTATAGTAGTGTATAAAAAGTTAAATGAAGAATAAACGCA
AATATAAAAGCTC

WO 2004/030615

PCT/US2003/028547

2883/6881

FIGURE 2661

MVKETTTYDVLGVKPNATQEELKKAYRKLALKYHPDKNPNEGEKFKQISQAYEVLSDAKKRELYDKGGEQAIKEG
GAGGGFGSPMDIFDMFFGGGGRMQRERRGKNVVHQLSVTLEDLYNGATRKLALQKNVICDKCEGRGGKKGAVECC
PNCRGTMQIRIHQIGPGMVQQIQSVCMECQGHGERISPKDRCKSCNGRKIVREKKILEVHIDKGMKDGQKITFH
GEGDQEPGLEPGDIIIVLDQKDHAVFTRGEDLFMCMDIQLVEALCGFQKPISTLDNRTIVITSHPGQIVKHGDI
KCVLNEGMPFYRRPYEKGRLLIEFKVNFPENGFLSPDKLSLLEKLLPERKEVEETDEMDQVELVDFDPNQERRRH
YNGEAYEDDEHHPRGGVQCQTS

WO 2004/030615

PCT/US2003/028547

2884/6881
FIGURE 2662

TAGTCGGGCGGGGTTGTGAGACGCCGCGCTCAGCTTCCATCGCTGGGCGGTCAACAAGTGCGGGCCTGGCTCAGC
GCGGGGGGGCGCGGAGACCGCGAGGCGACCGGGAGCGGCTGGGTTCCCGGCTGCGCGCCCTTCGGCCAGGCCGGG
AGCCGCGCCAGTCGGAGCCCCCGGCCAGCGTGGTCCGCCTCCCTCTCGGCGTCCACCTGCCCGGAGTACTGCCA
GCGGGCATGACCGACCCACCAGGGGCGCCGCCGCGGCGCTCGCAGGCCGCGGATGAAGAAGAAAACCCGGCGCC
GCTCGACCCGGAGCGAGGAGTTGACCCGGAGCGAGGAGTTGACCCTGAGTGAGGAAGCGACCTGGAGTGAAGAGG
CGACCCAGAGTGAGGAGGCGACCCAGGGCGAAGAGATGAATCGGAGCCAGGAGGTGACCCGGGACGAGGAGTCGA
CCCGGAGCGAGGAGGTGACCAGGGAGGAAATGGCGGCAGCTGGGCTCACCCTGACTGTCACCCACAGCAATGAGA
AGCAGACCTTCATGTTACCTCCCAGCAGGGCAGCAGTGAACCAGTTGTCCAAGACCTGGCCCAGGTTGTTGAAG
AGGTCATAGGGGTTCCACAGTCTTTTCAGAACTCATATTTAAGGGAAAATCTCTGAAGGAAATGGAAACACCGT
TGTCAGCACTTGGAATACAAGATGGTTGCCGGGTGATGTTAATTGGGAAAAAGAACAGTCCACAGGAAGAGGTTG
AACTAAAGAAGTTGAAACATTTGGAGAAGTCTGTGGAGAAGATAGCTGACCAGCTGGAAGAGTTGAATAAAGAGC
TTACTGGAATCCAGCAGGGTTTTCTGCCCAAGGATTTGCAAGCTGAAGCTCTCTGCAAACCTTGATAGGAGAGTAA
AAGCCACAATAGAGCAGTTTATGAAGATCTTGGAGGAGATTGACACACTGATCCTGCCAGAAAATTTCAAAGACA
GTAGATTGAAAAGGAAAGGCTTGGTAAAAAAGGTTGAGGCATTCTAGCCGAGTGTGACACAGTGGAGCAGAACA
TCTGCCAGGAGACTGAGCGGCTGCAGTCTACAACTTTGCCCTGGCCGAGTGAAGGTGTAGCAGAAAAAGGCTGTG
CTGCCCTGAAGAATGGCGCCACCAGCTCTGCCGTCTCTGGATCGGAATTTACCTGATTTCTTCAGGGCTGCTGGG
GGCAACTGGCCATTTGCCAATTTTCTACTCTCACACTGGTTCTCAATGAAAAATAGTGTCTTTGTGATTTGAGT
AAAGCTCCTATTCTGTTTTTCACAAAAA

WO 2004/030615

PCT/US2003/028547

2885/6881

FIGURE 2663

LAQRRGGARRPRGDRERLGSRLRALRPGREPRQSEPPAQRGPPPSRRPPARSTASGHDRPTRGAAAGARRPRMKKK
TRRRSTRSEELTRSEELTLSEEATWSEEATQSEEATQGEEMNRSQEVTRDEESTRSEEVTREEMAAAGLTVTVTH
SNEKHDHLHVTSQQGSSEPVVQDLAQVVEEVIGVPQSFQKLIFKGKSLKEMETPLSALGIQDGCVRVMLIGKKNSPQ
EEVELKKLKHLEKSVEKIADQLEELNKELTGIQQGFLPKDLQAEALCKLDRRVKATIEQFMKILEEIDTLILPEN
FKDSRLKRKGLVKKVQAF LAECDTVEQNICQETERLQSTNFALAE.

WO 2004/030615

PCT/US2003/028547

2886/6881
FIGURE 2664

GGGGAAGTCGAGGCGGGAGTGACTCTGCTTCCGTTTCTGGTTTTGCTCTAGTGTTTGGGTTTCTTCGCGGCTGCT
CAAGATGAACCGACTCTTCGGGAAAGCGAAACCCAAGGCTCCGCCGCCAGCCTGACTGGCTGCATTGGCACGGT
GGACAGTAGAGCAGAATCCATTGACAAGAAGATTTCTCGATTGGATGCTGAGCTAGTGAAGTATAAGGATCAGAT
CAAGAAGATGAGAGAGGGTCCTGCAAAGAATATGGTCAAGCAGAAAGCCTTGCGAGTTTTAAAGCAAAAGAGGAT
GTATGAGCAGCAGCGGGACAATCTTGCCCAACAGTCATTCAACATGGAACAAGCCAATTATACCATCCAGTCTTT
GAAGGACACCAAGACCACGGTTGATGCTATGAAACTGGGAGTAAAGGAAATGAAGAAGGCATACAAGCAAGTGAA
GATCGACCAGATTGAGGATTTACAAGACCAGCTAGAGGATATGATGGAAGATGCAAATGAAATCCAAGAAGCACT
GAGTCGCAGTTATGGCACCCCAAGAACTGGATGAAGATGATTTAGAAGCAGAGTTGGATGCACTAGGTGATGAGCT
TCTGGCTGATGAAGACAGTTCTTATTTGGATGAGGCAGCATCTGCACCTGCAATTCAGAAAGGTGTTCCCACTGA
TACAAAAACAAGGATGGAGTTCTGGTGGATGAATTTGGATTGCCACAGATCCCTGCTTCATAGATTTGCATCAT
TCAAGCATATCTTGTAACCAACACATATTATGGGACTAGGAAATATTTATCTTTCCAAATTTGCCATAACAGA
TTTAGGTTTCTTTCTTTCTTTGAAGGAAAGTTTAATTACATTGCTCTTTTATTTTTTCCATTAAAGAGACTCATT
GCTTGGGAAATGCTTTCTTCGTACTAAAATTTGATTCTTTTTTTCTTATGAAAAACGAACTCAGTTTAAAAGTA
TTTTTAGCTCGTATGACTTGTTTTTCATTCATTAATAATAATTTGAAATAAACTAAGGAAATGGAATCTTAAAG
TCTATGACAGTGTAACCTCTACAGTCTCAAATGACCTGATAAATTGATAAGACAAAGATGAGATTATTGGGGCTG
TTCATATTATGATTGAGAATCATTTTCTATTGTGGTATTATAGGTTGGTTAAAGTGATGGCCTTTTGATGGGTT
TTGTTGTGCTTTGTGAACAAGTCGTTACTGTGTCCATTATTGGAATGGAATTATCACTACTGTATCATGAGTGGG
TATTTTGATTCTATGGTTCCCTCAGTATTACATCTTGACTTGTAATCAATTATGAATATTTCTTGATATTTAATG
TATAGGACATTTATTTATACTCAATAAATATTTTTCAAAGGAAAAAAAAAAAAAAAAATCAAAAAAAAAAAAAAAAA
AAAAAAAA

WO 2004/030615

PCT/US2003/028547

2887/6881
FIGURE 2665

MNRLFGKAKPKAPPPSLTGCIGTVDSRAESIDKKISRLDAELVKYKDQIKKMREGPAKNMVKQKALRVLKQKRM
EQQRDNLAQQSFNMEQANYTIQSLKDTKTTVDAMKLGVKEMKKAYKQVKIDQIEDLQDQLEDMMEDANEIQEALS
RSYGTPELDEDDLEAELDALGDELLADEDSSYLDEAASAPAIPEGVPTDTKNKDGVLVDEFGLPQIPAS

WO 2004/030615

PCT/US2003/028547

2888/6881

FIGURE 2666

TGCTCGCTGCGCCACCGCCTCCCGCCACCCCTGCCCGCCCGACAGCGCCGCGCCTGCCCGCCATGGGTCGACA
GAAGGAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGCTGCTCCGACAGGCGCTGGCCGAGTG
CCTGGGGACCTCATCCTGGTGATGTTTGGCTGTGGCTCCGTGGCCAGGTTGTGCTCAGCCGGGGCACCACGG
TGGTTTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGG
GGCCACCTGAACCTGCCGTGACCTTTGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTA
CACCTGGCACAGACGCTGGGAGCCTTCTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCA
CTTCGCGGACAACCAGCTTTTTGTTTCGGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACA
CTTGATATGATCAATGGCTTCTTTGACCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGTGCTGGCCATTGT
TGACCCCTACAACAACCCCGTCCCCGAGGCCTGGAGGCCTTCACCGTGGGCCTGGTGGTCCTGGTCATTGGCAC
CTCCATGGGCTTCAACTCCGGCTATGCCGTCAACCCTGCCCGGGACTTTGGCCCCCGCCTTTTTACAGCCCTTGC
GGGCTGGGGCTCTGCAGTCTTCACGACCGGCCAGCATTGGTGGTGGGTGCCATCGTGTCCCCACTCCTGGGCTC
CATTGCGGGTGTCTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCACCTCCAACGAGGAAGA
GAATGTGAAGCTGGCCCATGTGAAGCACAAGGAGCAGATCTGAGTGGGCAGGGGCCATCTCCCCACTCCGCTGCC
CTGGCCTTGAGCATCCACTGACTGTCCAAGGGCCACTCCAAGAAGCCCCCTTCACGATCCACCCTTTCAGGCTA
AGGAGCTCCCTATCTACCCTCACCCCACGAGACAGCCCTTCAGGATTTCACCTGGACCTTGCCCAAATAGCACC
TTAGGCCACTGCCCTAAGCTGGGGTGGAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGA
ATGGGCAGCAGGTATGTGTGTGTGTGCATGTGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGG
GGGGGTTCCAGATATTCAGGGCAAGGGACCAAGTCGGAAGGGATTCTGGCTATTGGGGGAGCCCAGAGACAGGG
GAAGGCAGCCTGTCCATCTGTGCATAAGGAGAGGAAAGTTCCAGGGTGTGTATGTTTCAGGGGCTTCACATGGAG
GAGCTGCAGATAGATATGTGTTTCT

WO 2004/030615

PCT/US2003/028547

2889/6881
FIGURE 2667

MGRQKELVSRCGEMLHIRYRLRQALAECLGTLILVMFGCGSVAQVVLSRGTHGGFLTINLAFGFAVTLGILIAG
QVSGAHLNPAVTTFAMCFLAREPWIKLPITYTLAQTLGAFLGAGIVFGLYYDAIWHFADNQLFVSGPNGTAGIFATY
PSGHLDMINGFFDQFIGTASLIVCVLAIVDPYNNPVPRGLEAFVGLVVLVIGTSMGFNSGYAVNPARDFGPRLF
TALAGWGSAVFTTGQHWWVPVIVSPLLGSIAGVFVYQLMIGCHLEQPPPSNEEENVKLAHVKHKEQI

2890/6881

FIGURE 2668

GGCACGAGGGAGGCGGCGGCTCCAGCCGGCGCGGCGGAGGCTCGGCGGTGGGATCCGGCGGGCGGTGCTAGCTC
CGCGCTCCCTGCCTCGCTCGCTGCCGGGGGCGGTGCGAAGGCGCGGCGCGAAGCCCGGTGGCCCCGAGGGCGCGA
TGGCTGCTCCTGTCCCGTGGGCCTGCTGTGCTGTGCTTGCCGCGCGCGCGCAGTTGTCTACGCCCAGAGACACA
GTCCACAGGAGGACCCCCATGTGCAGTACGAGCGCCTGGGCTCTGACGTGACACTGCCATGTGGGACAGCAAAC
GGGATGCTGCGGTGACGTGGCGGGTAAATGGGACAGACCTGGCCCCCTGACCTGCTCAACGGCTCTCAGCTGGTGC
TCCATGGCCTGGAACCTGGGCCACAGTGGCCTCTACGCCTGCTTCCACCGTGACTCCTGGCACCTGCGCCACCAAG
TCCTGCTGCATGTGGGCTTGCCGCGCGGGGAGCCTGTGCTCAGCTGCCGCTCCAACACTTACCCCAAGGGCTTCT
ACTGCAGCTGGCATCTGCCCCACCCACCTACATTCCCAACACCTTCAATGTGACTGTGCTGCATGGCTCCAAAA
TTATGGTCTGTGAGAAGGACCCAGCCCTCAAGAACCGCTGCCACATTCGCTACATGCACCTGTTCTCCACCATCA
AGTACAAGGTCTCCATAAGTGTGAGCAATGCCCTGGGCCACAATGCCACAGCTATCACCTTTGACGAGTTCACCA
TTGTGAAGCCTGATCCTCCAGAAAATGTGGTAGCCCGGCCAGTGCCAGCAACCCTCGCCGGCTGGAGGTGACGT
GGCAGACCCCTCGACCTGGCCTGACCCTGAGTCTTTTCTCTCAAGTTCTTTCTGCGCTACCGACCCCTCATCC
TGGACCAAGTGGCAGCATGTGGAGCTGTCCGACGGCACAGCACACACCATCACAGATGCCTACGCCGGGAAGGAGT
ACATTATCCAGGTGGCAGCCAAGGACAATGAGATTGGGACATGGAGTGACTGGAGCGTAGCCGCCACGCTACGC
CCTGGACTGAGGAACCGCGACACCTCACCACGGAGGCCAGGCTGCGGAGACCACGACCAGCACCACAGCTCCC
TGGACCCCCACCTACCACGAAGATCTGTGACCCTGGGGAGCTGGGCAGCGCGGGGGACCTCGGCACCCTTCT
TGGTCAGCGTCCCCATCACTCTGGCCCTGGCTGCCGCTGCCGCCACTGCCAGCAGTCTCTTGATCTTGAGCCCCGGC
ACCCCATGAGGACATGCAGAGCACCTGCAGAGGAGCAGGAGGCCGAGCTGAGCCTGCAGACCCCGGTTTCTATT
TTGCACACGGGCAGGAGGACCTTTTGCAATTCTCTTCAGACACAATTTGTGGAGACCCCGCGGGCCCCGGGCTGC
CGCCCCCAGCCCTGCCGCACCAAGCTGGCCCTCCTTCCCTCCTCAGGGGAGGTGGGCCATGCAGCTAACCCACC
CACCAAAGACCCCTCACCCTGGCCCTTGGGCTGGACCTCCAATGCCAGCGACTCCAGGAGCCCTTGGGGGA
CGTGAGGGGAGCCTCTCACATCCGATTTCTCCTCCTGCCCCAGCCTCCTGTCTATCCCAGGGTCTCTGTTGCCAC
CATCAGATTATAAGCTCCTGATGCTGGGGGGGCCAGCCATCCCCCTCCCCCAGCACCCACAATTTTCAGTCCC
CTCCCCCTCTGCCCTGTTTTGTATACCCCTCCCCCTGACCCTGCTCCTATCCCACAGTATTTAATGCCCTGTGAGTC
CCTTCTAGTCTGACTCAATGGTAACCTGCTGTATTTGAATTTTTATAGATGTATATACAGGGTGGGGGGAGTGG
GCGGTTCTCATTAACGTCACCATTTTCATGAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2891/6881

FIGURE 2669

MAAPVPWACCAVLAAAAVVYAQRHSPQEAPHVQYERLGSDVTLPCGTANWDAAVTWRVNGTDLAPDLLNGSQLV
LHGLELGHSGLYACFHRDSWHLRHQVLLHVGLPPREPVLSCRSNTYPKGFYCSWHLPTPTYIPNTFNVTVLHGSK
IMVCEKDPALKNRCHIRYMHLESTIKYKVISVSNALGHNATAITFDEFTIVKPDPPENVVARPVPSNPRRLEVT
WQTPSTWPDPESEFPLKFFLRYPILIDQWQHVELSDGTAHTITDAYAGKEYIIQVAAKDNEIGTWSWVAHAHAT
PWTEEPRLTTEAQAAETTTSTTSSLAPPPTTKICDPGELGSGGGPSAPFLVSPITLALAAAAATASSLLI

WO 2004/030615

PCT/US2003/028547

2892/6881
FIGURE 2670

CTCCGAGGCCGTGAGCGCAAAGCCTCAGGCCCGGCTCCCTCCTGAGCTGCGCCGTGCCAGGCCGCCCGCCGGGA
TGCAGTGGGCGGTGGGCCGGCGGTGGGCGTGGGCCGCGCTGCTCCTGGCTGTCGCAGCGGTGCTGACCCAGGTCTG
TCTGGCTCTGGCTGGGTACGCAGAGCTTCGTCTTCCAGCGCGAAGAGATAGCGCAGTTGGCGCGGCAGTACGCTG
GGCTGGACCACGAGCTGGCCTTCTCTCGTCTGATCGTGGAGCTGCGGCGGCTGCACCCAGGCCACGTGCTGCCCG
ACGAGGAGCTGCAGTGGGTGTTTCGTGAATGCGGGTGGCTGGATGGGCGCCATGTGCCTTCTGCACGCCTCGCTGT
CCGAGTATGTGCTGCTCTTCGGCACCGCCTTGGGCTCCCGCGGCCACTCGGGGCGCTACTGGGCTGAGATCTCGG
ATACCATCATCTCTGGCACCTTCCACCACTGGAGAGAGGGCACCACCAAAGTGAGGTCTTCTACCCAGGGGAGA
CGGTAGTACACGGGCCTGGTGAGGCAACAGCTGTGGAGTGGGGGCCAAACACATGGATGGTGGAGTACGGCCGGG
GCGTCATCCCATCCACCCTGGCCTTCGCGCTGGCCGACACTGTCTTCAGCACCCAGGACTTCCTCACCCCTCTTCT
ATACTCTTCGCTCCTATGCTCGGGGCCTCCGGCTTGAGCTCACCACCTACCTCTTTGGCCAGGACCCTTGACCAG
CCAGGCCTGAAGGAAGACCTGCGGATGGACAGGAGCGGGCAGCCCGCACATATCCACTTGCTGGAGCCCATGTTT
ACAGACAGGGACATACACCATGCAGATCCTGAGTTCCTGCTGTATGAGCAGGGATATCCATGCTTATGTATCCAA
ACACAGAGACCCATGGGAACAAATGAGACACATATAGATACTGAGACCTGTGTGTACAGTAGGACCATGCACTCA
CACCCATCTGGAGAGGGAGCCCCCGGTATACCAAGGGAGCCAGTTGTGTTTCAGACACACACATCACAGCTTGACT
CACTAACTGAGGCCTTTCCATAGCTCCACAGCTTCCCACCTCCTCCCCACCAAACCGGGTTCTAGAGTTAAGGA
TGGGGGAGGGTATTATACTGCCTCAGTCTGACTCCTCAACCCAGCAGCAATTTGAGGGGATGAGGGGGAAGAGGA
GCTGCCTTTTGGAGGCCCCCTTCACCTGCAGCTATGATGCCCTTCCCCTTCTCCCCTGTCTCACCATATGCCTT
ATCCCCATTCTACTCCCCTGCTATGCAAGTGCCCTGTGGCTTGTCCCCAACCCCTCAGCAACAAAGCTCAGCT
GGGGAACGAGAGTAATTTGAAGAATGCTTGAAGTCAGCGTCTTCCATTCCAGAAAGACCCCCATTCTTCCTTTGG
GGGTATGATGTGGAAGCTGGTTTCAGCCCAGGACCCACCACTGAGGAGAGGATCTAGACAGGTGGGCCTAATTCC
AAGGGGCCCTTCTGGCCTGGAGAAGGCCTTTTACACACACACAACACATACACACACACACACACATATCAC
AGTTTTCACACAGCCCCCTGCTGCATTCTCTGTCCATCTGTCTGTTTCTATTAATAAAGATTTGTTGATCTGTTCC

WO 2004/030615

PCT/US2003/028547

2893/6881

FIGURE 2671

MQWAVGRRWAWAALLLAVAAVL TQVVWLWLGTQSFVFQREEIAQLARQYAGLDHELAFSRLIVELRRLHPGHVLP
DEELQWVFVNAGGWMGAMCLLHASLSEYVLLFGTALGSRGHSGRYWAEISDTIISGTFHQWREGTTKSEVFYPGE
TVVHGPGEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTIFYTLRSYARGLRLELTYYLFGQDP

WO 2004/030615

PCT/US2003/028547

2894/6881
FIGURE 2672

GATGATATGGCAGCCTGCATGAAGTCTGTAAGTGAAGGAGCTTAATTATCCAATGAGGAGAGGAATCTTCTC
TCAGTTGCTTATAAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGCATCGTCTCAAGTATTGAACAAAAGACA
GAAGGTGCTGAGAAAAAACAGCAGATGGCTCAAGAATACAGAGAGAAAACTGAGACCTAGCTAAGAGATAGCTG
CAATGATGTACTGTCCCTTTTGGAAAAGTTCTTGATCCCCAGTGCTTCACAAGCGAGAGCAAATCTTCTATTG
AAAATGAAAGGAGATCACTACCATTACTTGGCTGAGGTTGCCGCTGGTGATGATAAGAAAGGGACTGTGGATCAG
TCACAACAAGCACACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACATATCCTATCAGACTGGGT
CTGGCCCTTAACTTCTCCGTGTTCTATTATGACGTTCTGAATTCAGAGAAAGCCTGCTCTCTTGCAAAGACA
GCTTTTGATGAAGCCATTGCTGAACCTGATACATTAAGTGAAGAGTCATCAAAGACAGCACACTAATAATGCAA
TTACTGAGAGACAACCTTGACATTGTGGTTTTTATGTTTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAG
TTATCTGTTTTCATCTTGAGGTGGCCAATATGGGGATGTGGAATTTTTATACAAGTTATTAATGTTTGGCATAGT
ACTTTTGGTACATTGTGGCTT

WO 2004/030615

PCT/US2003/028547

2895/6881
FIGURE 2673

CTGCCACTGCCACCTCGCGGATCAGGAGCCAGCGTTGTTGCCCCGACGCCTCGCTGCCGGTGGGAGGAAGCGAGA
GGGAAGCCGCTTGCGGGTTTGTGCGCGCTGCTCGCCCACCGCCTGGAAGAGCCGAGCCCCGCCCCAGTCGGTCGC
TTGCCACCGCTCGTAGCCGTTACCCGCGGGCGGCCACAGCCGCCGGCCGGGAGAGGCGCGGCC**ATGG**CCTCTGG
AGCCGATTCAAAGGTGATGACCTATCAACAGCCATTCTCAAACAGAAGAACCCTCCCAATCGGTTAATTGTTGA
TGAAGCCATCAATGAGGACAACAGTGTGGTGTCTTGTCCCAGCCCAAGATGGATGAATTGCAGTTGTTCCGAGG
TGACACAGTGTGTGCTGAAAGGAAAGAAGAGACGAGAAGCTGTTTGCATCGTCCTTTCTGATGATACTTGTCTGA
TGAGAAGATTTCGGATGAATAGAGTTGTTTCGGAATAACCTTCGTGTACGCCTAGGGGATGTCATCAGCATCCAGCC
ATGCCCTGATGTGAAGTACGGCAAACGTATCCATGTGCTGCCCATTTGATGACACAGTGGAAAGGCATTACTGGTAA
TCTCTTCGAGGTATACCTTAAGCCGTACTTCTTGGAAAGCGTATCGACCCATCCGGAAGGAGACATTTTTCTTGT
CCGTGGTGGGATGCGTGCTGTGGAGTTCAAAGTGGTGGAAACAGATCCTAGCCCTTATTGCATTGTTGCTCCAGA
CACAGTGATCCACTGCGAAGGGGAGCCTATCAAACGAGAGGATGAGGAAGAGTCCTTGAATGAAGTAGGGTATGA
TGACATTGGTGGCTGCAGGAAGCAGCTAGCTCAGATAAAGGAGATGGTGGAACTGCCCTGAGACATCCTGCCCT
CTTTAAGGCAATTGGTGTGAAGCCTCCTAGAGGAATCCTGCTTTACGGACCTCCTGGAACAGGAAAGACCCTGAT
TGCTCGAGCTGTAGCAAATGAGACTGGAGCCTTCTTCTTCTTGATCAATGGTCCTGAGATCATGAGCAAATTGGC
TGGTGAGTCTGAGAGCAACCTTCGTAAAGCCTTTGAGGAGGCTGAGAAGAATGCTCCTGCCATCATCTTCATTGA
TGAGCTAGATGCCATCGCTCCCAAAGAGAGAAAACCTCATGGCGAGGTGGAGCGGCGCATTTGTATCACAGTTGTT
GACCCTCATGGATGGCCTAAAGCAGAGGGGCACATGTGATTGTTATGGCAGCAACCAACAGACCCAACAGCATTGA
CCCAGCTCTACGGCGATTTGGTGCCTTTGACAGGGAGGTAGATATTGGAATTCCTGATGCTACAGGACGCTTAGA
GATTCTTCAGATCCATACCAAGAACATGAAGCTGGCAGATGATGTGGACCTGGAACAGGTAGCCAATGAGACTCA
CGGGCATGTGGGTGCTGACTTAGCAGCCCTGTGCTCAGAGGCTGCTCTGCAAGCCATCCGCAAGAAGATGGATCT
CATTGACCTAGAGGATGAGACCATTGATGCCGAGGTGATGAACCTCTCTAGCAGTTACTATGGATGACTTCCGGTG
GGCCTTGAGCCAGAGTAACCCATCAGCACTGCGGGAAACCGTGGTAGAGGTGCCACAGGTAACCTGGGAAGACAT
CGGGGGCCTAGAGGATGTCAAACGTGAGCTACAGGAGCTGGTCCAGTATCCTGTGGAGCACCCAGACAAATTCCT
GAAGTTTGGCATGACACCTTCCAAGGGAGTTCTGTTCTATGGACCTCCTGGCTGTGGGAAAACCTTTGTTGGCCAA
AGCCATTGCTAATGAATGCCAGGCCAACTTCATCTCCATCAAGGGTCCTGAGCTGCTCACCATGTGGTTTGGGGA
GTCTGAGGCCAATGTGAGAGAAATCTTTGACAAGGCCCGCCAAGCTGCCCCCTGTGTGCTATTCTTTGATGAGCT
GGATTGATTGCCAAGGCTCGTGGAGGTAACATTGGAGATGGTGGTGGGGCTGCTGACCGAGTCATCAACCAGAT
CCTGACAGAAATGGATGGCATGTCCACAAAAAAAATGTGTTTCATCATTTGGCGCTACCAACCGGCCTGACATCAT
TGATCCTGCCATCCTCAGACCTGGCCGTCTTGATCAGCTCATCTACATCCCACTTCCTGATGAGAAGTCCCGTGT
TGCCATCCTCAAGGCTAACCTGCGCAAGTCCCCAGTTGCCAAGGATGTGGACTTGGAGTTCCTGGCTAAAATGAC
TAATGGCTTCTCTGGAGCTGACCTGACAGAGATTTGCCAGCGTGCTTGCAAGCTGGCCATCCGTGAATCCATCGA
GAGTGAGATTAGGCGAGAACGAGAGAGGCAGACAAACCCATCAGCCATGGAGGTAGAAGAGGATGATCCAGTGCC
TGAGATCCGTGAGATCACTTTGAAGAAGCCATGCGCTTTGCGCGCCGTTCTGTGAGTGACAATGACATTCGGAA
GTATGAGATGTTTGGCCAGACCTTCAGCAGAGTGGGGGCTTTGGCAGCTTCAGATTCCTTCAGGGAACCAGGG
TGGAGCTGGCCCCAGTCAGGGCAGTGGAGGCGGCACAGGTGGCAGTGTATACACAGAAGACAATGATGATGACCT
GTATGGCT**TAAG**TGGTGGTGGCCAGCGTGCAGTGAGCTGGCCTGCCTGGACCTTGTTCCCTGGGGGTGGGGGCGCT
TGCCCAGGAGAGGGGACCAGGGGTGCGCCACAGCCTGCTCCATTCTCCAGTCTGAACAGTTTCAGCTACAGTCTGA
CTCTGGACAGGGGGTTTCTGTTGCAAAAATACAAAACAAAAGCGATAAAATAAAAGCGATTTTCATTTGGTAGGC
GGAGAGTGAATTACCAACAGGGAATTGGGCCTTGGGCCTATGCCATTTCTGTTGTAGTTTGGGGCAGTGCAAGGG
ACCTGTGTGGGGTGTGAACCAAGGCACTACTGCCACCTGCCACAGTAAAGCATCTGCACTTGACTCAATGCTGCC
CGAGCCCTCCCTTCCCCCTATCCAACCTGGGTAGGTGGGTAGGGGCCACAGTTGCTGGATGTTTATATAGAGAGT
AGGTTGATTTATTTTACATGCTTTTGAGTTAATGTTGGAAAAC**TAAT**CACAAGCAGTTTCTAAACCAAAAAATGA
CATGTTGTAAGGACAATAAACGTTGGGTCAAAATGG

WO 2004/030615

PCT/US2003/028547

2896/6881
FIGURE 2674

MASGADSKGDDLSTAILKQKNRPNRLIVDEAINEDNSVVSLSQPKMDELQLFRGDTVLLKGKKRREAVCIVLSDD
TCSDEKIRMNRVVRNNLRVRLGDVISIQPCPDVKYGKRIHVLPIDDTVEGITGNLFEVYLKPYFLEAYRPIRKGD
IFLVRGGMRAVEFKVVETDPSPYCIVAPDTVHCEGEPIKREDEEESLNEVGYDDIGGCRKQLAQIKEMVELPLR
HPALFKAIGVKPPRGILLYGPPGTGKTLIARAVANETGAFFFLINGPEIMSKLAGESNLKAFEEAEKNAPAI
IFIDELDAIAPKREKTHGEVERRIVSOLLTMDGLKQRAHVIVMAATNRPNSIDPALRRFGRFDREVDIGIPDAT
GRLEILQIHTKNMKLADDVDLEQVANETHGHVGADLAALCSEAALQAIRKKMDLIDLEDETIDAEVMNSLAVTMD
DFRWALSQSNPSALRETVEVPQVTWEDIGGLEDVKRELQELVQYPVEHPDKFLKFGMTPSKGVLFYGPPGCGKT
LLAKAIANECQANFISIKGPELLTMWFGESEANVREIFDKARQAAPCVLFFDELDSIAKARGGNI DGGGAADRV
INQILTEMDGMSTKKNVFIIGATNRPDIIDPAILRPGRLDQLIYIPLPDEKSRVAILKANLRKSPVAKDVDLEFL
AKMTNGFSGADLTEICQRACKLAIRESEIESEIRRERERQTNPSAMEVEEDDPVPEIRRDHFEEAMRFARRSVSDN
DIRKYEMFAQTLQQSRGFGSFRFP SGNQGGAGPSQGSGGGTGGSVYTEDNDDDLYG

WO 2004/030615

PCT/US2003/028547

2897/6881
FIGURE 2675

GGCTTCTGGGAGCGACCGCTCCGCTCGTCTCGTTGGTTCCGGAGGTCGCTGCGGCGGTGGGAAATGCTGGCGCGC
GCGGCGCGGGGCACTGGGGCCCTTTTGCTGAGGGGCTCTCTACTGGCTTCTGGCCGCGCTCCGCGCCGCGCCTCC
TCTGGATTGCCCCGAAACACCGTGGTACTGTTTCGTGCCGCAGCAGGAGGCCTGGGTGGTGGAGCGAATGGGCCGA
TTCCACCGGATCCTGGAGCCTGGTTTGAACATCCTCATCCCTGTGTAGACCGGATCCGATATGTGCAGAGTCTC
AAGGAAATTGTCATCAACGTGCCTGAGCAGTCGGCTGTGACTCTCGACAATGTAACCTGCAAATCGATGGAGTC
CTTTACCTGCGCATCATGGACCCTTACAAGGCAAGCTACGGTGTGGAGGACCCTGAGTATGCCGTACCCAGCTA
GCTCAAACAACCATGAGATCAGAGCTCGGCAAACCTCTCTCTGGACAAAGTCTTCCGGGAACGGGAGTCCCTGAAT
GCCAGCATTGTGGATGCCATCAACCAAGCTGCTGACTGCTGGGGTATCCGCTGCCTCCGTTATGAGATCAAGGAT
ATCCATGTGCCACCCCGGGTGAAAGAGTCTATGCAGATGCAGGTGGAGGCAGAGCGGCGGAAACGGGCCACAGTT
CTAGAGTCTGAGGGGACCCGAGAGTCGGCCATCAATGTGGCAGAAGGGAAGAAACAGGCCCAGATCCTGGCCTCC
GAAGCAGAAAAGGCTGAACAGATAAATCAGGCAGCAGGAGAGGCCAGTGCAGTTCTGGCGAAGGCCAAGGCTAAA
GCTGAAGCTATTGGAATCCTGGCTGCAGCTCTGACACAACATAATGGAGATGCAGCAGCTTCACTGACTGTGGCC
GAGCAGTATGTGAGCGCGTTCTCCAAACTGGCCAAGGACTCCAACACTATCCTACTGCCCTCCAACCTGGCGAT
GTCACCAGCATGGTGGCTCAGGCCATGGGTGTATATGGAGCCCTCACCAAAGCCCCAGTGCCAGGGACTCCAGAC
TCACTCTCCAGTGGGAGCAGCAGAGATGTCCAGGGTACAGATGCAAGTCTTGATGAGGAACCTGATCGAGTCAAG
ATGAGTTAGTGGAGCTGGGCTTGCCAGGGAGTCTGGGGACAAGGAAGCAGATTTTCCTGATTCTGGCTCTAGCT
TCCCTGCCAAGATTTTGGTTTTTATTTTTTTTATTTGAACTTTAGTCGTGTAATAAACTCACCAGTGGCAAACCTG
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2898/6881
FIGURE 2676

MLARAARGTGALLLRGSLASGRAPRRASSGLPRNTVVLFPQQEAWVVERMGRFHRILEPGLNILIPVLDRIY
VQSLKEIVINVPEQSAVTLDNVTLQIDGVLYLRIMDPYKASYGVEDPEYAVTQLAQTTRSELGKLSLDKVFRE
ESLNASIVDAINQAADCWGIRCLRYEIKDIHVPPRVKESMQMQVEAERRKRATVLESEGTRESAINVAEGKKQAQ
ILASEAEKAEQINQAAGEASAVLAKAKAKAEAIRILAAALTQHNGDAAASLTVAEQYVSFAFSKLAKDSNTILLPS
NPGDVTSMVAQAMGVYGALTKAPVPGTPDSLSSGSSRDVQGTASLDEELDRVKMS

WO 2004/030615

PCT/US2003/028547

2899/6881
FIGURE 2677

GGGCGGCCGGCCAATGCCGGACCGCTTCGGCACCGCCCCGCCGATCCCTCCACCCGTGGGCCGGCAATGGCGGGC
GCAGTTTCGCTCTTGGGTGTGGTGGGGCTGCTGCTTGTGTCTGCGCTGTCCGGGGTCCTAGGAGACCGCGCCAAT
CCCGACCTCCGGGCACACCCAGGGAACGCAGCCCACCCGGCTCTGGAGCCACGGAACCCGGCGGCGACACCG
CTCAAGGATCAACGCGAGCGGACCCGGGCCGGGTGCTGCCTCTGGGGGCGCTGTACACCGCGGCCGTGCGGGCT
TTTGTGCTGTACAAGTGTTCAGGGGAAAGATGAAACTGCGGTTCTCCACGAGGAGGCAAGCAAGCAGCAGCCA
CTGCAGTCAGGTGGGTTTAGCAGAAGTCTGTGCTGGGTGCGGGGAGTTTAGGGGACAGCAGAAGATACATAACCA
CTTCTGCCCCCTTTTTCCCTTATCCCCAGAGCAACAGCTGGCCAGTTGACACAACAGCTGGCCCAGACAGAGC
AGCACCTGAACAACCTGATGGCCCAGCTGGACCCCTTTTTGAGCGGTGAGGAGAGCAATGATTCTGTGAATTTT
TGGGGAATTTGTGGCAGGAGGGAGGAATGGGGACATAGGTTGGGAGCCACTGAGTGGACATTTCTTCAGTGTGAC
TACTCTGGCTGGAGCCCAGCAGGAGCTTCTGAACATGAAGCTATGGACCATCCACGAGCTGCTGCAAGATAGCAA
GCCGACAAAGGATATGGAGGCTTCAGAACCAGGTGAAGGCTCGGGAGGCGAGTCTGCTGGAGGTGGAGACAAAGT
CTCTGAAACTGGAACATTCCTGATCTCTCCCCACACAGAGGCCAGCAGACCTCTTCCTGAGGACTTCTGTTTAAA
GGAGGACGAGGAGGAGATTGGTGACAGTCAGGCCTGGGAGGAGCCCAAACTGGAGCACAGAGACATGGAACCT
AGCTACTTCCTGGGAGGTGGGGCGGGGACTACGGAGAAGGTGCAGCCAGGCTGTGGCAAAGGGCCCCAGTCACAG
CCTTGCTGGGAAGGAGGGACGACAGCTGAAGGTCGACTAAAACAAAGTCTGTTTTCATG

WO 2004/030615

PCT/US2003/028547

2900/6881
FIGURE 2678

MAGAVSLLGVVGLLLVSALSGVLGDRANPDLRAHPGNAAHPGSGATEPRRRPPLKQDQERTRAGSLPLGALYTAA
VAAFVLYKCLQGKDETAVLHEEASKQQPLQSGGFSRSLCWVGGV

WO 2004/030615

PCT/US2003/028547

2901/6881
FIGURE 2679

AGTGTGATCCCTCAGCCAGGGCATGGAGCTCTCTGCCCCGGTTTCGCGGTGCCCGGTGCAAGAGCAGCGTGCCC
GCTGGGAGCGGAAACGCGCCTGCACCGCCCCGGGAGCTGCTAGAGACCGAGCGGCGCTACCAAGAACAGCTGGGGC
TGGTGGCCACGTACTTTTTGGGGATCCTGAAAGCCAAGGGGACCCTGCGACCACCTGAGCGCCAGGCCCTGTTTG
GCTCCTGGGAGCTCATCTACGGCGCCAGCCAGGAGCTGCTTCCCTACCTGGAAGGAGGATGCTGGGGCCAAGGGC
TGGAGGGCTTCTGCCGCCACTTGGAGCTCTATAACCAATTTGCTGCCAACTCAGAGAGGTCCCAGACCACCCTGC
AGGAGCAGCTAAAGAAAAATAAGGTTTCCGGAGGTTTGTACGGCTTCAGGAAGGCCGCCCTGAGTTTGGGGGCC
TTCAGTCCAGGACCTGCTCCCTCTGCCTCTGCAACGGCTCCAGCAGTATGAGAATCTCGTCGTAGCTTTGGCTG
AAAACACAGGTCCCAACAGCCCTGACCATCAACAGCTCACACCTGTCTTCCCTCATGAGAAGCTACTGCTTATG
TCCACAGACCAGGAGGAGCTGTCACGCTGGTACCACAGTCTGACTTGGGCTATCAGCAGCCAGAAAACTAGAGG
AATCTTATAGATTCCAGAATCAGGATACCTCAGGGATAGGTACAGCCAAGAGTACAAAGGAATCTTCAGTACT
GAACAAAACAGAACCCTTCATGATTTGACAAAGGTCACTTTCTGTTGCTTGGACCAAGCTACTCCAGATCATCT
GACCAACTCTTAAAAATCACGGCCAGGCACAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAAGCAGAGGTGG
CAGGATCATTCAGCCCAGGAGTTCAAGACCAGCCTGGGCAACACAGTGAGTGAGACCCTGTCTCTATTTAAGAA
AAAATAATTAAGAAATTTTATTAAGAAAGAAATCAGGAAACCAAGTCCAACCCAACTAAACCTCAAATGAACC
AGCCCCTAACACAGATGAGGGGATTTGGGACTGATAAGCTCTGTGCTGTGTCATGGCCCCGTCATTTATCAAGGC
TGCAGCTTTGTAAATGTGGCTATTTTTATGTTGTGTATAGTTTCTATCATTTATTTTTTCCACTGGATTGAGTAA
AGTTTTTTTTCTTTTTTTTGGGAAAGACCCTTCTGTCTCAGTTTGTCTATGAGAAAAGGGATTTTTGGGCCCTGA
ACGCGGGCATGCTGGTGGCCTCAGGAATACGAGGAAAAGAGCTGGAGCTCCCTCTATCTTCTCTGCTGTCACT
GGAAGGCAGCCTCTTTTTGTCTAATAAGGACAGCTCTCAAGAAGGCCAGTTGTCTTAGGCACCTAGTATGG
GTGTGTACAACCAACTAGGATCGAAAAACACACAGGAGCACTCCATCATGAAAACAGACTTTGTTTTAGTCGAC
CTTCAGCTGTGCTCCCTCCTTCCCAGCCAAGGCTGTGACTGGGGCCCTTTGCCACAGCCTGGCTGCACCTTCTCC
GTAGTCCCCGCCCCACCTCCCAGGAAGTAGCTAGGTTCATGTCTCTGTGCTCCAGTTTGTGGGCTCCTCCCAGG
CCTGACTGTCAACCAATCTCCTCCTCGTCTCCTTTAAACAGAAGTCCCTCAGGAAGAGGTCTGCTGGCCTCTGTGT
GGGGAGAGATCAGGAATGTTCCAGTTTCAGAGACTTTGTCTCCACCTCCAGCAGACTCGCCTCCCGAGCCTTCAC
CTGTTTCTGAAGCCTCCATATCCTTGTCCGGCTTGCTATCTTGACAGCAGCTCGTGGATGGTCCATAGCTTCATGT
TCAGAAGCTCCTGCTGGGCTCCAGCCAGAGTAGTCACACTGAAGAAATGTCCACTCAGTGGCTCCCAACCTATGT
CCCCATTCTCCTCCTGCCACAAATTCCTCAAAAATTCACAGAATCATGCTCTCCTCACCGCTCAAAAAGGGG
GTCCAGCTGGGCCATCAGGTTGTTTCAAGGTGCTGCTGTCTGGGCCAGCTGTTGTGTCAACTGGGCCAGCTGTTG
CTCTGGGGATAAGGGAAAAAGGGGGCAGAAGTGGTTATGTATCTTCTGCTGTCCCCTAAACTCCCCGAGCCAG
CACAGACTTCTGCTAAACCCACCTGACTGCAGTGGCTGCTGCTTGCTTGCTTCCCTCCTGAGGAGAACCGCAGTTTCA
TCTTTCCCTGTTGTGGAAGAAGGAAAGGGCAGTACTGAAGCAACAAGGTTCTGCTCCATCACCTCAGTCTCCAG
AGCCAGCCAAGAGAGAGTGCAATTTGAGATGGAGACAGTGATTGGGTTTTTACCTCAGAGAATCACAATCCTAGT
CTATCTAGCTCCTCACCCAGCATATGAAGCGACGTCTATGTCCCACACATGGTCAGTTTGTGAAACACCTCCA
GGAATGAGCAACTCCCTCCGGTTTGAAAAAGCTCTGGTGGCTGAGTGCTGTGGCTCACACCTGTAATCCCAGCA
CTTCGGGAAGCCAAGGGCCTCCTCCCAAGGAGAACATGAGACCACTTCATATCTGGAATCTAGAAACACTGGCT
GCAGCAATCAACCTCCTGTGCCAAGGCTGGCCCCACTCTTGTAGCATGGACACTGCTAGCTGGGTTCAAATCCCA
GCTCCAGCAGTTGCCAGCGCTGGGTGACCTCGAGCAAGTGACTACTCCTCACTGGATTGTAGGAGAACTAAATGT
GATAGTCATTATTTACAGTTCACCACACGCTCTTCACATCCGTTACCTCCCTGGATCCTCAAAATAACCTCATAA
TATTGGAAGGCC

WO 2004/030615

PCT/US2003/028547

2902/6881

FIGURE 2680

TGCTGCTCTCCTCCCGCTCCGTCCTCCTCGCCTGCCACCGGTGCACCCAGTCCGCTCACCCAGCCCAGTCCGTCC
GGTCCTCACC GCCTGCCGGCCGGCCCCACCCCCACCGCAGGCCATGGACGCCATCAAGAAGAAGATGCAGATGCT
GAAGCTGGACAAGGAGAACGCCATCGACCGCGCCGAGCAGGCCGAAGCCGACAAGAAGCAAGCTGAGGACCGCTG
CAAGCAGCTGGAGGAGGAGCAGCAGGCCCTCCAGAAGAAGCTGAAGGGGACAGAGGATGAGGTGGAAAAGTATTC
TGAATCCGTGAAGGAGGCCCAGGAGAACTGGAGCAGGCCGAGAAGAAGGCCACTGATGCTGAGGCAGATGTGGC
CTCCCTGAACCGCCGCATT CAGCTGGTTGAGGAGGAGCTGGACCGGGCCCAGGAGCGCCTGGCTACAGCCCTGCA
GAAGCTGGAGGAGGCCGAGAAGGCGGCTGATGAGAGCGAGAGAGGAATGAAGGTCATCGAAAACCGGGCCATGAA
GGATGAGGAGAAGATGGA ACTGCAGGAGATGCAGCTGAAGGAGGCCAAGCACATCGCTGAGGATT CAGACCGCAA
ATATGAAGAGGTGGCCAGGAAGCTGGTGATCCTGGAAGGAGAGCTGGAGCGCTCGGAGGAGAGGGCTGAGGTGGC
CGAGAGCCGAGCCAGACAGCTGGAGGAGGA ACTTCGAACCATGGACCAGGCCCTCAAGTCCCTGATGGCCTCAGA
GGAGGAGTATTCCACCAAAGAAGATAAATATGAAGAGGAGATCAA ACTGTTGGAGGAGAAGCTGAAGGAGGCTGA
GACCCGAGCAGAGTTTGCCGAGAGGTCTGTGGCAAAGTTGGAGAAAACCATCGATGACCTAGAAGAGACCTTGGC
CAGTGCCAAGGAGGAGAACGTCGAGATT CACCAGACCTTGACCAGACCCTGCTGGA ACTCAACAACCTGTGAGG
GCCAGCCCCACCCCCAGCCAGGCTATGGTTGCCACCCCAACCCAATAAACTGATGTTACTAGCCTCTC

WO 2004/030615

PCT/US2003/028547

2903/6881
FIGURE 2681

MDAIKKKMQMLKLDKENAIDRAEQAEADKKQAEDRCKQLEEEQALQKKLKGTEDEVEKYSESVKEAQEKLEQAE
KKATDAEADVASLNRRIQLVEEELDRAQERLATALQKLEEAKEKADESERGMKV IENRAMKDEEKMELQEMQLKE
AKHIAEDSDRKYEEVARKLVILEGELERSEERA EVAESRARQLEELRTMDQALKSLMASEEEYSTKEDKYEEEI
KLLEEKLKEAETRAEFAERSVAKLEKTIDDL EETLASAKEENVEIHQTL DQTLLELNNL

WO 2004/030615

PCT/US2003/028547

2904/6881
FIGURE 2682A

CCCAGAAAGCGGCGGGGCGGGCGGGCGGGCGGGCGGCAGAGCCAGGCAGCGCAGGTATAGCCAGGCTGGAGA
AAAGAAGCTGCCACCAATGGTTGCACTTTCACTGAAGATCAGCATTGGGAATGTGGTGAAGACGATGCAGTTTGAG
CCGTCTACCATGGTGTACGACGCTGCCGCATCATTCTGTAGCGGATCCCAGAGGCCCGAGCTGGTCTCTCCAGC
GACTTTGGGCTCTTTCTGTGATGATGACCCCAAAAAGGTATATGGCTGGAGGCTGGGAAAGCTTTGGACTAC
TACATGCTCCGAAATGGGGACACTATGGAGTACAGGAAGAAACAGAGACCCCTGAAGATCCGTATGCTGGATGGA
ACTGTGAAGACGATCATGGTGGATGACTCTAAGACTGTCACTGACATGCTCATGACCATCTGTGCCCGCATTGGC
ATCACCAATCATGATGAATATTCTTGGTTCGAGAGCTGATGGAAGAGAAAAAGGAGGAAATAACAGGGACCTTA
AGAAAGGACAAGACATTGCTGCGAGATGAAAAGAAGATGGAGAACTAAAGCAGAAATTGCACACAGATGATGAG
TTGAACTGGCTGGACCATGGTCGGACACTGAGGGAGCAGGGTGTAGAGGAGCAGAGACGCTGCTGCTGCGGAGG
AAGTTCTTTTACTCAGACCAGAATGTGGATTCCCGGGACCCTGTACAGCTGAACCTCCTGTATGTGCAGGCACGA
GATGACATCCTGAATGGCTCCCACCCTGTCTCCTTTGACAAGGCCTGTGAGTTTGTGGCTTCCAATGCCAGATC
CAGTTTGGGCCCCACAATGAGCAGAAGCACAAGGCTGGCTTCCTTGACCTGAAGGACTTCTGCCCAAGGAGTAT
GTGAAGCAGAAGGGAGAGCGTAAGATCTTCCAGGCACACAAGAATTGTGGGCAGATGAGTGAGATTGAGGCCAAG
GTCCGCTACGTGAAGCTAGCCCGTTCTCTCAAGACTTACGGTGTCTCCTTCTTCTGGTGAAGGAAAAATGAAA
GGGAAGAACAAGCTAGTGCCAGGCTTCTGGGCATCACCAGGAGTGTGTGATGCGAGTGGATGAGAAGACCAAG
GAAGTGATCCAGGAGTGAACCTCACCACATCAAACGCTGGGCTGCGTCTCCCAAAGCTTCACCTTGGATTTT
GGAGATTACCAAGATGGCTATTACTCAGTACAGACAATGAAGGGAGCAGATTGCACAGCTCATTGCCGGCTAC
ATCGATATCATCTGAAGAAGAAAAAAGCAAGGATCACTTTGGGCTGGAAGGAGATGAGGAGTCTACTATGCTG
GAGGACTCAGTGTCCCCAAAAAGTCAACAGTCTTGCAGCAGCAATACAACCGGGTGGGGAAAGTGGAGCATGGC
TCTGTGGCCCTGCCTGCCATCATGCGCTCTGGAGCCTCTGGTCTGAGAATTTCCAGGTGGGCAGCATGCCCCCT
GCCAGCAGCAGATTACCAGCGGCCAGATGCACCGAGGACACATGCCTCCTCTGACTTCAGCCCAGCAGGCACTC
ACTGGAACCATTAACCTCCAGCATGCAGGCCGTGCAGGCTGCCAGGCCACCCTGGATGACTTTGACACTCTGCCG
CCTCTTGGCCAGGATGCTGCCTCTAAGGCCTGGCGTAAAAACAAGATGGATGAATCAAAGCATGAGATCCACTCT
CAGGTAGATGCCATCACAGCTGGTACTGCGTCTGTGGTGAACCTGACAGCAGGGGACCCTGCTGAGACAGACTAT
ACCGCAGTGGGCTGTGCAGTCACCACAATCTCCTCCAACCTGACGGAGATGTCCCGTGGGGTGAAGCTGCTGGCT
GCCTTGCTGGAGGACGAAGGCGGCAGTGGTTCGGCCCTGTTGCAGGCAGCAAAGGGCCTTGCGGGAGCAGTGTCA
GAACTGCTGCGCAGTGCCCAACCAGCCAGTGCTGAGCCCCGTCAGAACCTGCTGCAAGCAGCTGGGAACGTGGGC
CAGGCCAGTGGGGAGCTGTTGCAACAAATTGGGGAAAGTGATACTGACCCCCACTTCCAGGATGCGCTAATGCAG
CTCGCCAAAGCTGTGGCAAGTGTGTCAGCTGCCCTGGTCTCAAGGCCAAGAGTGTGGCCCAGCGGACAGAGGAC
TCGGGACTTCAGACCCAAGTTATTGCTGCAGCAACACAGTGTGCCCTATCCACTTCCCAACTAGTGGCCTGTACT
AAGGTGGTGGCACCTACAATCAGCTCACCTGTCTGCCAAGAGCAACTGGTGGAGGCTGGACGACTGGTAGCCAAA
GCCGTGGAGGGCTGTGTGTCTGCCTCCAGGCAGCTACAGAGGATGGGCAACTGTTGCGAGGGGTAGGAGCAGCA
GCCACAGCTGTCAACCAGGCCCTAAATGAGCTGCTGCAGCATGTGAAAGCCCATGCCACAGGGGCTGGGCCTGCT
GGCCGTTATGACCAGGCTACTGACACCATCTTAACCGTCACTGAGAACATCTTTAGCTCCATGGGTGATGCTGGG
GAGATGGTGGGACAGGCCCGCATCTGGCCCCAAGCCACATCTGACCTGGTCAATGCCATCAAGGCTGATGCTGAG
GGGGAAGTGATCTGGAGAACTCCCAGAACTCTTAAGTGCTGCCAAGATCCTAGCTGATGCCACAGCCAAGATG
GTAGAGGCTGCCAAGGGAGCAGCTGCCACCCCTGACAGTGAGGAGCAGCAGCAGCGGCTGCGGGAGGCAGCTGAG
GGGCTGCGCATGGCCACCAATGCAGCTGCGCAGAATGCCATCAAGAAAAAGCTGGTGCAGCGCCTGGAGCATGCA
GCCAAGCAGGCTGCAGCCTCAGCCACACAGACCATCGCTGCAGCTCAGCACGCAGCCTCTACCCCCAAAGCCTCT
GCCGGCCCCCAGCCCCCTGCTGGTGCAGAGCTGCAAGGCAGTGGCAGAGCAGATTCCACTGCTGGTGCAGGGCGCTC
CGAGGAAGCCAAGCCCAGCCTGACAGCCCCAGCGCTCAGCTTGCCCTCATTGCTGCCAGCCAGAGCTTCCTGCAG
CCAGGTGGGAAGATGGTGGCAGCTGCAAAGGCCCTCAGTGCCAACGATTACAGGACAGGCTTCAGCCATGCAGCTG
AGTCAGTGTGCCAAGAACCTGGGCACCGCGCTGGCTGAACTCCGGACGGCTGCCCAGAAGGCTCAGGAAGCATGT
GGACCTTTGGAGATGGATTCTGCACTGAGTGTGGTACAGAATCTAGAGAAAGATCTACAGGAAGTGAAGGCAGCA
GCTCGAGATGGCAAGCTTAAACCCCTTACCTGGGGAGACAATGGAGAAGTGTACCCAGGACCTGGGCAACAGCACC
AAAGCCGTGAGCTCAGCCATCGCCCAGCTACTGGGAGAGGTTGCCAGGGCAATGAGAATTATGCAGGTATTGCA
GCTCGGGATGTGGCAGGTGGGCTGCGGTCACTGGCCCAGGCCGCTAGGGGAGTCTGCTGCACTGACGTGAGATCCT
GCAGTGCAGGCCATTGTACTTGATACGGCCAGTGATGTGCTGGACAAGGCCAGCAGCCTCATTGAGGAGGCGAAA

WO 2004/030615

PCT/US2003/028547

2905/6881
FIGURE 2682B

AAGGCAGCTGGCCATCCAGGGGACCCTGAGAGCCAGCAGCGGCTTGCCCAGGTGGCTAAAGCAGTGACCCAGGCT
CTGAACCGCTGTGTCAGCTGCCTACCTGGCCAGCGCATGTGGATAATGCCCTGAGGGCAGTTGGAGATGCCAGC
AAGCGACTCCTGAGTGACTCGCTTCCTCCTAGCACTGGGACATTTCAAGAAGCTCAGAGCCGTTGAATGAAGCT
GCTGCTGGGCTGAATCAGGCAGCCACAGAACTGGTGCAGGCCTCTCGGGGAACCCCTCAGGACCTGGCTCGAGCC
TCAGGCCGATTTGGACAGGACTTCAGCACCTTCCTGGAAGCTGGTGTGGAGATGGCAGGCCAGGCTCCGAGCCAG
GAGGACCGAGCCCAAGTTGTGTCCAACCTGAAGGGCATCTCCATGTCTTCAAGCAAACCTTCTTCTGGCTGCCAAG
GCCCTGTCCACGGACCCCTGCTGCCCTAACCTCAAGAGTCAGCTGGCTGCAGCTGCCAGGGCAGTAACCTGACAGC
ATCAATCAGCTCATCACTATGTGCACCCAGCAGGCACCCGCCAGAAGGAGTGTGATAACGCCCTGCGGGAATTG
GAGACGGTCCGGGAACTCCTGGAGAACCCAGTCCAGCCCATCAATGACATGTCTACTTTGGTTGCCTGGACAGT
GTAATGGAGAACTCAAAGGTGCTGGGCGAGGCCATGACTGGCATCTCCCAAATGCCAAGAACGGAAACCTGCCA
GAGTTTGGAGATGCCATTCCACAGCCTCAAAGGCATTTGTGGCTTACCGAGGCAGCTGCACAGGCTGCATAT
CTGGTTGGTGTCTCTGACCCCAATAGCCAAGCTGGACAGCAAGGGCTAGTGGAGCCACACAGTTTGGCCGTGCA
AACCAGGCAATTGAGATGGCCTGCCAGAGTTTGGGAGAGCTGGCTGTACCCAGGCCCCAGGTGCTCTCTGCAGCC
ACCATTGTGGCTAAACACACCTCTGCACTGTGTAACAGCTGTGCGCTGGCTTCTGCCCCGTACCAACCAATCCTACT
GCCAAGCGCCAGTTTGTACAGTCAGCCAAGGAGGTGGCCAACAGCACAGCTAATCTTGTCAAGACCATCAAGGCG
CTAGATGGGGCCTTCACAGAGGAGAACCGTGCCAGTGCCGAGCAGCAACAGCCCCCTCTGCTGGAGGCTGTGGAC
AATCTGAGTGCCTTTGCGTCCAACCTGAGTTCTCCAGCATTCCTGCCCAGATCAGCCCTGAGGGTTCGGGCTGCC
ATGGAGCCCATTGTGATCTCTGCCAAGACAATGTTAGAGAGTGCCGGGGGACTCATCCAGACAGCCGGGCCCTC
GCAGTCAATCCCCGGGACCCCCCGAGCTGGTCCGGTGTGGCCGGCCACTCCCCGTACTGTCTCAGACTCCATCAAG
AAGCTAATTACAAGCATGAGGGACAAGGCTCCAGGGCAGCTGGAGTGTGAAACGGCCATTGCAGCTCTGAACAGT
TGTCTACGGGACCTAGACCAGGCTTCCCTCGCTGCAGTCAGCCAGCAGCTTGCTCCCCGTGAGGGAATCTCTCAA
GAGGCCTTGACACTCAGATGCTCACTGCAGTCCAAGAGATCTCCCATCTCATTGAGCCGCTGGCCAATGCTGCC
CGGGCTGAAGCCTCCAGCTGGGACACAAGGTGTCCAGATGGCGCAGTACTTTGAGCCGCTCACCCCTGGCTGCA
GTGGGTGCTGCCTCCAAGACCCCTGAGCCACCCGCAGCAGATGGCACTCCTGGACCAGACTAAAACATTGGCAGAG
TCTGCCCTGCAGTTGCTATACACTGCCAAGGAGGCTGGTGGTAACCCAAAGCAAGCAGCTCACACCCAGGAAGCC
CTGGAGGAGGCTGTGCAGATGATGACCGAGGCCGTAGAGGACCTGACAACAACCCCAACGAGGCAGCCAGTGCT
GCTGGGGTTCGTGGGTGGCATGGTGGACTCCATCACCAGGCCATCAACCAGCTAGATGAAGGACCAATGGGTGAA
CCAGAAGGTTTCCTTCGTGGATTACCAAACAATATGGTGCAGGACAGCCAAGGCCATTGCAGTGACCGTTGAGGAG
ATGGTTACCAAGTCAAACACCAGCCAGAGGAGCTGGGCCCTCTTGCTAACCAGCTGACCAGTGACTATGGCCGT
CTGGCCTCGGAGGCCAAGCCTGCAGCGGTGGCTGCTGAAATGAAGAGATAGGTTCCCATATCAAACACCGGGTA
CAGGAGCTGGGCCATGGCTGTGCCGCTCTGGTACCAAGGCAGGCGCCCTGCAGTGCAGCCCCAGTGATGCCATC
ACCAAGAAGGAGCTCATAGAGTGTGCCCCGAGAGTCTCTGAGAAGGTCTCCACGTCTGGCTGCGCTCCAGGCT
GGGAATCGTGGCAACCAGGCCTGCATCACAGCAGCCAGCGCTGTGTCTGGTATCATTGCTGACCTCGACACCACC
ATCATGTTGCCACTGCTGGCACGCTCAATCGTGAGGGTACTGAACTTTCGCTGACCACCGGGAGGGCATCCTG
AAGACTGCGAAGGTGCTGGTGGAGGACACCAAGGTCTGGTGCAAAACGCAGCTGGGAGCCAGGAGAAGTTGGCG
CAGGCTGCCCAGTCTCCGTGGCGACCATCACCCGCCTCGCTGATGTGGTCAAGCTGGGTGCAGCCAGCCTGGGA
GCTGAGGACCCTGAGACCCAGGTGGTACTAATCAACGCAGTGAAAGATGTAGCCAAAGCCCTGGGAGACCTCATC
AGTGCAACGAAGGCTGCAGCTGGCAAAGTTGGAGATGACCCTGCTGTGTGGCAGCTAAAGAACTCTGCCAAGGTG
ATGGTGACCAATGTGACATCATTGCTTAAGACAGTAAAGCCGTGGAAGATGAGGCCACCAAAGGCACTCGGGCC
CTGGAGGCAACCACAGAACACATACGGCAGGAGCTGGCGGTTTTCTGTTCCCCAGAGCCACCTGCCAAGACCTCT
ACCCAGAAAGACTTCATCCGAATGACCAAGGGTATCACCATTGGCAACCGCCAAGGCCGTTGCTGCTGGCAATTCC
TGTGCCCAGGAAGATGTCATTGCCACAGCCAATCTGAGCCGCCGTGCTATTGCAGATATGCTTCGGGCTTGCAAG
GAAGCAGCTTACCACCCAGAAGTGGCCCCCTGATGTGCGGCTTCAGCCCTGCATATGGCCGGGAGTGTGCCAAT
GGCTACCTGGAAGTGTGACCATGTACTGCTGACCCTGCAGAAGCCAAGCCAGAACTGAAGCAGCAGTTGACA
GGACATTCAAAGCGTGTGGCTGGTTCCGTCACTGAGCTCATCCAGGCTGCTGAAGCCATGAAGGGAACAGAAATGG
GTAGACCCAGAGGACCCACAGTCATTGCTGAGAATGAGTCTCTGGGAGCTGCAGCCGCCATTGAGGCTGCAGCC
AAAAAGCTAGAGCAGCTGAAGCCCCGGGCCAAACCCAAGGAGGCAGATGAGTCCTTGAACCTTGAGGAGCAGATA
CTAGAAGCTGCCAAGTCCATTGCAGCAGCCACCAGTGCAGTGGTAAAGGCTGCGTCCGCTGCCCAGAGAGAACTA

WO 2004/030615

PCT/US2003/028547

2906/6881
FIGURE 2682C

GTGGCCCAAGGGAAGGTGGGTGCCATTCCAGCCAATGCACTGGACGATGGGCAGTGGTCCCAGGGCCTCATTCT
GCTGCCCCGATGGTGGCTGCGGCCACCAACAATCTGTGTGAGGCAGCCAATGCAGCTGTACAAGGCCATGCCAGC
CAGGAGAAGCTCATCTCATCAGCCAAGCAGGTAGCTGCCTCCACAGCCCAGCTCCTTGTGGCCTGCAAGGTCAAG
GCTGACCAGGACTCGGAGGCAATGAAACGACTTCAGGCTGCTGGCAACGCAGTGAAGCGAGCCTCAGATAATCTG
GTGAAAGCAGCACAGAAGGCTGCAGCCTTTGAAGAGCAGGAGAATGAGACAGTGGTGGTGAAAGAGAAGATGGTT
GGCGGCATTGCCAGATCATCGCAGCACAGGAAGAAATGCTTCGGAAGGAACGAGAGCTGGAAGAGGCGCGGAAG
AAACTGGCCCAGATCCGGCAGCAGCAGTACAAGTTTCTGCCTTCAGAGCTTCGAGATGAGCACTAAGAAGCCTC
TTCTATTTAATGCAGACCCGGCCCAGAGACTGTGCGTGCCACTACCAAAGCCTTCTGGGCTGTCGGGGCCCAACC
TGCCCAACCCCAGCACTCCCCAAAGTGCTTGCCAAACCCAGGGCCTGGCCCCGCCAGTCCCGCAGTACATCCC
CTGTCCCCTCCCCAACCCCAAGTGCTTCATGCCCTAGGGCCCCCAAGTGCTGCCCCTCCCCAGAGTATTAAC
GCTCCAAGAGTATTATTAACGCTGCTGTACCTCGATCTGAATCTGCCGGGGCCCCAGCCCACTCCACCCTGCCAG
CAGCTTCAGCCAGTCCCCACAGCCTCATCAGCTCTCTTCACCGTTTTTTTGATACTATCTTCCCCACCCCCAGC
TACCCATAGGGGCTGCAGAGTTATAAGCCCCAACAGGTCATGCTCCAATAAAAAATGATTCTACCTACAAAAAAA
AAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2907/6881
FIGURE 2683

MVALSLKISIGNVVKTMQFEPSTMVYDACRIIRERIPEAPAGPPSDFGLFLSDDDPKKGIWLEAGKALDYMLRN
GDTMEYRKKQRPLKIRMLDGTVKTIMVDDSKTVDMLMTICARIGITNHDEYSLVRELMEEEKKEEITGTLRKDKT
LLRDEKKMEKLKQKLHTDDELNWLHDGRTLREQGVVEEHETLLLRKFFYSQNVDSRDPVQLNLLYVQARDDILN
GSHPVSFDKACEFAGFQCQIQFGPHNEQKHKAGFLDLKDFLPKEYVKQKGERKIFQAHKNCGQMSEIEAKVRYVK
LARSCLKTYGVSFLLVKEKMGKNKLVPRLLGITKECVMRVDEKTKEVIQEWNLNLIKRWAAAPSKSFTLDFGDYQD
GYYSVQTTEGEQIAQLIAGYIDIILKKKKSKDHFGLEGDEESTMLEDSVSPKKSTVLQQQYNRVGKVEHGSVALP
AIMRSGASGPENFQVGSMPPAQQQITSGQMRGHMPPLTSAQQALTGTINSSMQAVQAAQATLDDFDLPLPLGQD
AASKAWRKKNKMDSEKHEIHSQVDAITAGTASVVNLTAGDPAETDYTAVGCAVTTISSNLTEMSRGVKLLAALLED
EGGSGRPLLQAAKGLAGAVSELLRSAQPASAEPRQNLQAAAGNVGQASGELLQQIGESDTPHFDALMQLAKAV
ASAAAALVLKAKSVAQRTEDSGLQTQVIAAATQCALSTSQLVACTKVVAPTISSPVCQEQLVEAGRLVAKAVEGC
VSASQAATEDGQLLRGVGAAATAVTQALNELLQHVKAHATGAGPAGRYDQATDITLTVTENIFFSSMGDAGEMVGQ
ARILAQATSDLVNAIKADAEGESDLENSRKLSSAAKILADATAKMVEAAKGAAAHDPDSEEQQQRLREAAEGLRMA
TNAQAQNAIKKKLVQRLEHAAKQAAASATQTIAAAQHAASSTPKASAGPQPLLVSCKAVAEQIPLLVSQVGRGSQA
QPDSPSAQLALIAASQSFLQPGGKMVAAKASVPTIQDQASAMQLSQCAKNLGTALAEALRTAAQKAQEACGPLEM
DSALSVMQNLKEDLQEVKAAARDGKLKPLPGETMEKCTQDLGNSTKAVSSAIAQLLGEVAQGNENYAGIAARDVA
GGLRSLAQAAARGVAALTSDDPAVQAIVLDTASDVLKASSLIEEAKKAAGHPGDPESQQRQAQVAKAVTQALNRCV
SCLPGQRDVDNALRAVGDAKRLSDSLPPSTGTQEAQSRLEAAAGLNQAATELVQASRGTFQDLARASGRFG
QDFSTFLEAGVEMAGQAPSQEDRAQVVSNLKGISMSSSKLLAAKALSTDPAAPNLKSQAAAAARAVTDSINQLI
TMCTQQAPGQKECDNALRELETVRELLENPVQPINDMSYFGCLDSVMENSKVLGEAMTGISQNAKNGNLPEFGDA
ISTASKALCGFTEAAAQAAYLGVSDPNSQAGQQGLVEPTQFARANQAIQMACQSLGEPGCTQAQVLSAATIVAK
HTSALCNSCRLASARTTNPTAKRQFVQSAKEVANSTANLVKTIKALDGAFTENRAQCRAATAPILLEAVDNLISAF
ASNPEFSSIPAQISPEGRAAMEPIVISAKTMLSEAGGLIQTARALAVNPRDPPSWSVLGHRSRTVSDSIKKLITS
MRDKAPGQLECEATAIALNSCLRDLDQASLAAVSQQLAPREGISQEALHTQMLTAVQEISHLIEPLANAARAEAS
QLGHKVSQMAQYFEPLTLAAVGAASKTLSHPQQMALLDQTKTLAESALQLLYTAKEAGGNPKQAAHTQEALEEAV
QMMTEAVEDLTITLNEAASAAGVVGMVDSITQAINQLDEGPMGEPEGSFVDYQTTMVRTAKAIAVTVQEMVTKS
NTSPEELGPLANQLTSDYGRASEAKPAAVAAENEEIGSHIKHRVQELGHGCAALVTKAGALQCSPSDAYTKKEL
IECARRVSEKVS HVLAALQAGNRGTQACITAASAVSGIIADLDTTIMFATAGTLNREGTETFDHREGILKTAKV
LVEDTKVLVQNAAGSQEKLAQAAQSSVATITRLADVVKLGAASLGAEDPETQVVLINAVKDVAKALGDLISATKA
AAGKVGDDPAVWQLKNSAKVMVTNVTSLKTKVKAVEDEATKGTRALEATTEHIRQELAVFCSPPEPAKTSTPEDF
IRMTKGITMATAKAVAAGNSCRQEDVIATANLSRRAIADMLRACKEAAYHPEVAPDVRLRALHYGRECANGYLEL
LDHVLLTLQKPSPELKQQLTGHSKRVSAGVTELIQAAEAMKGTEWVDPEDPTVIAENELLGAAAAIEAAAKKLEQ
LKPRAKPKADESLNFEEQILEAAKSIAAATSALVKAASAAQRELVAQGVGAIPANALDDGQWSQGLISAARMV
AAATNNLCEAANAQVGHASQEKLISSAKQVAASTAQLLVACKVKADQDSEAMKRLQAAGNAVKRASDNLVKAAQ
KAAAFEEQENETVVVKEKMGVGGIAQIIAAQEEMLRKERELEEARKKLAQIRQQQYKFLPSELRDEH

WO 2004/030615

PCT/US2003/028547

2908/6881
FIGURE 2684

AGACCGGAAAGGGCTCGGGTCATCCCGGCGCCAGGGTCACCTTCCACAGGGCTGGCACCTGGGCGCGGGCGCTG
CCCCGAGCCCGGCCGGGACCTGGCGCCCAATCCTGGGGGACCCGGTGCCGTGGCCAGGGGCGGGCCGAGG
TCCCGGGGGCGGTGCCCTTGCGGGCCCCGTCCCGGGGCGGTGCCGTGGTGGGCTGGCCCCGCGGCTCCTCCCCTCTCT
GCGGGCCAGTCGCCCCTTTGGCCGGGCGAGCTAATCGTCGGCTCAATGACGACGAGGCCCGACCCCTTCCCGTCCA
GGACCTACAGAGACAACCGAAGGAGAGCCCCAAGGCGGCTTCTTTGCTGTCGCCGCCCCACTGAAGCAAGAGCTC
CCCGGCTCCACTGAAACACCAGCTCATTAAAGCTTTCCCCAACGCCCGGCCCTCCGGGACGATACCTAACAACGA
CCGGCGCCCCGATCTGGAATAGGCTGGCGAGATACTTAGTATCCGAGGGCTCGGGACTTGGCGCCATCGAGGTCA
TGGGGACCCAGGATCCAGGGAACATGGGAACCGGCGTCCCAGCCTCGGAGCAGATAAGCTGTGCCAAAGAGGATC
CACAAGTTTATTGCCCTGAAGAGACTGGCGGCACCAAGGATGTGCAGGTTACAGACTGTAAGAGTCCCAGAGACA
GCCGACCCCCAAAAGAGACGGACTGCTGCAATCCGGAGGACTCTGGGCAGCTGATGGTTTCTATGAGGGTAAAG
CTATGGGCTACCAGGTGCCCTCCCCTTTGGCTGGCGCATCTGTCTGGCTCATGAGTTTACAGAGAAGAGGAAACCCCT
TTCAAGCTAACACGTCTCCCTAAGCAACATGATAAAGCATATAGGCATGGGCTTGAGGTACCTGCAGTGGTGGT
ACCGGAAGACCCATGTGGAAAAGAAGACACCTTTCATCGACATGATCAATTCTGTACCCCTAAGACAGATTTATG
GTTGTCCCTTGGGTGGCATCGGGGGAGGCACTATTACCCGTGGCTGGAGAGGCCAGTTCTGTGCTTGGCAGCTTA
ACCCCTGGAATGTATCAGCACCGGACAGTCATCGCTGACCAAGACAGCAGCCTGCCTGTAGGAGTCTTTGTGTGGG
ATGTGGAAAATGAAGGGGACGAAGCTCTAGATGTGTCCATCATGTTCTCCATGCGGAATGGACTGGGTGGTGGAG
ACGATGCCCCAGGGGTTTGTGGAATGAGCCCTTCTGTCTGGAGCGTAGCGGGGAAACTGTCCGGGGGCTGCTCCT
GCATCATCCAACCCCTTCCAAACCCCTACACGATGGCTGTGGCTGCACGAGTCACGGCAGCTACCACGGTAACCCA
CATCACAGCCTTTGACCCTGACAGCACGGGGCAGCAGGTGTGGCAGGATCTACTTCAGGATGGACAGCTGGACTC
TCCCACTGGCCAAAGCACCCCTACGCAGAAAGGAGTAGGCATTGCTGGAGCTGTGTGTGTTTCCAGCAAGTTGCG
ACCTCGAGGGCAGTGCCGCCTGGAGTTTTCACTGGCTTGGGACATGCCCAGGATCATGTTTGGAGCTAAAGGCCA
AGTCCACTACAGGCGGTATACAAGGTTCTTTGGCCAGGATGGAGATGCAGCACCTGCCCTCAGCCACTATGCACT
GTGCCGATACGCAGAGTGGGAAGAGAGGATCTCAGCTTGGCAGAGCCCCGGTATTGGATGACAGATCACTGCCTGC
CTGGTACAAATCTGCGCTGTTCAATGAACATATACTTCTTGCTGATGGAGGCACAGTGTGGCTGGAAGTTCTTGA
GGACTCCCTACCAGAGGAGCTGGGCAGAAACATGTGTACCTCCGCCCCACCCTACGGGACTACGGTGCATTTGG
CTACCTTGAGGGCCAGGAGTACCGCATGTACAACACATATGATGTCCACTTTTATGCTTCCCTTGCCCTCATCAT
GCTCTGGCCCAAACCTTGAGCTCAGCCTACAGTATGACATGGCTCTGGCCACTCTCAGGGAGGACCTGACACGGCG
ACGGTACCTGATGAGTGGGGTGTGGCACCTGTGAAAAGGAGGAACGTCATCCCCCATGATATTGGGGACCCAGA
TGATGAACCATGGCTCCGCGTCAATGCATATTTAATCCATGATACTGCTGATTGGAAGGACCTGAACCTGAAGTT
TGCTGTGACAGGTTTATCGGGACTATTACCTCACGGGTGATCAAAACTTCTTGAAGGACATGTGGCCTGTGTGTCT
AGCTGTGATGGAATCTGAAATGAAGTTTGACAAGGACCATGATGGACTCATTGAAAATGGAGGCTATGCAGACCA
GACCTATGATGGATGGGTGACCACAGGCCCCAGTGCTTACTGTGGAGGGCTGTGGCTGGCAGCTGTGGCTGTGAT
GGTCCAGATGGCTGCTCTGTGTGGGGCACAGGACATCCAGGATAAGTTTTCTTCTATCCTCAGCCGGGGCCAAGA
AGCCTATGAGAGACTGCTGTGGAATGGCCGCTATTACAACATATGACAGCAGCTCTCGGCCCTCAGTCTCGTAGTGT
TATGTCTGACCAGTGTGCTGGACAGTGGTTCCCTGAAGGCCTGTGGCCTAGGAGAAGGAGACACTGAGGTGTTTCC
TACCCAACATGTGGTCCGTGCTCTCCAAACTATCTTTGAGCTGAACGTCCAGGCCTTTGCAGGAGGGGCCATGGG
GGCTGTGAATGGGATGCAGCCCCATGGTGTCCCTGATAAATCCAGTGTGCAGTCTGATGAAGTCTGGGTGGGTGT
GGTCTACGGGCTGGCAGCTACCATGATCCAAGAGGGCCTGACTTGGGAGGGCTTCCAGACAGCTGAAGGCTGCTA
CCGTACCGTGTGGGAGCGCCTGGGTCTGGCCTTCCAGACCCAGAGGCATACTGCCAGCAGCGAGTGTTCGCTC
ACTGGCCTACATGCGGCCACTGAGCATATGGGCCATGCAGCTAGCCCTGCAACAGCAGCAGCACAAAAAGGCCTC
CTGGCCAAAAGTCAAACAGGGCACAGGACTAAGGACAGGGCCTATGTTTGGACCAAAGGAAGCCATGGCAAACCT
GAGCCCAGAGTGAGCCGTCTGAACTGTGGGAGGGAAGTGCTAACAGCCCAGCCTCCAGCCTGGCCTTTCCTCCTT
CCCCTCTGAACCTCCTGCAACCCTGAGCCATCAGGACAATCATACCCCTTCCCTTCTCTCCACCCAATTGTGCCA
GTAAATGGGGTTGAGGGTGACCTAGGCAGCATTAGAATCACTTATTTATTTCTTCTCACCTGTTCCCTGACT
GCGTGAATGTTCAGGGAGGTGAGTTGATTTCCCAGGTACATTGATGGTGTGACAGACACATGGGTACAAATAA
AAGACCCAGAAAGCC

WO 2004/030615

PCT/US2003/028547

2909/6881

FIGURE 2685

MAVAARVTAATTVTHTITAFDPDSTGQQVWQDLLQDGLDSTPTGQSTPTQKGVGIAGAVCVSSKLRPRGQCRLEFS
LAWDMPRIMFGAKGQVHYRRYTRFFGQDGDAAALSHYALCRYAEWEERI SAWQSPVLDDRS LPAWYKSALFNEL
YFLADGGTVWLEVLDSLPEELGRNMCHLRPTLRDYGRFGYLEGQEYRMYNTYDVH FYASFALIMLWPKLELSLQ
YDMALATLREDLTRRRYLM SGVMA PVKRRNVIPHDIGDPDDEPWL RVNAYLIHDTADWKDLNLKFVLQVYRDYYL
TGDQNF LKDMWPVCLAVMESEMKFDKDH DGLIENG GYADQTYDGWVTTGPSAYCGGLWLA AVAVMVQMAALCGAQ
DIQDKFSSILSRGQEAYERLLWNGRYNYDSSSRPQSRVMSDQCAGQWFLKACGLGEGDTEVFPTQHVVRLQT
IFELNVQAFAGGAMGAVNGMQPHGVDPKSSVQSDEVWVG VVYGLAATMIQEGLTWEGFQTAEGCYRTVWERLGLA
FQTPEAYCQQRVFRSLAYMRPLSIWAMQLALQQQHHKASWPKVKQGTGLRTGPMFGPKEAMANLSPE

WO 2004/030615

PCT/US2003/028547

2910/6881
FIGURE 2686

AAAAAGAAATCAAGAATGCAATTTTATTTACAATAGTCACGCCAAAAATACCTAGAAATAAATTTAACTGAGGAT
 GTAAAAGACCTCTACAAGGAGAGTTCAATCGGTAGCGGGAGCGGAGAGCTGACCCAGAGAGCCCTGGGCAGCCC
 CACCTCCGCCGCCGGCCTAGTTACCATCACACCCCGGGAGAAGCCGCAGCTGCCGCAGCCGGCCCCAGTCACCAT
 CACCGCAACTATGAGCAGCGAGGGCCGAGACCCAGCAGCCGCCCGCCGCTCCCCACGCCGCCCGCCCCCTCAGCG
 CCGCCGACACCCACCCAGCACTGCAGGCAGCGGCGCAGGAAGCGGTGGCCCGGGCGGCCTCACATCGGCGGCGC
 CTGCCGGCGGGGACAAGAAGGTCATCGCAACGAAGGTTTGGGAACAGTAAAATGGTTCAGTGTAAGGAACGGAT
 ATGGTTTCATCAACAGGAATGACACCAAGGAAGATGTATTTGTACACCAGACTGCCAGAAAGAAGAATAACCCCA
 GGAAGTACCTTCGCAGTGTAGGAGATGGAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAAAGGGTGCGGAGG
 CAGCAAATGTTACAGGGCCTGGTGGTGTTCAGTTCAAGGCAGTACATATGCAGCAGACCGTAACCATTATAGAC
 GCTATCCACGTCGTAGGGTCTCCACGCAATTACCAGCAAAATTACCAGAATAGTGAGAGTGGGGAAAAGAACGA
 GGGATCGGAGAGTGCTCCCGCAGGCCAAGCCCAACAACGCCGGCCCTACCGCAGGCGAAGGTTCCACCTTACTA
 CATGCGGAGACCCTATGGGCGTCGACCACAGTATTCCAACCTCCTGTGCAGGGTGAAGTGATGGAGGGTGCTGA
 CAACCAGGGTGCCAGGAGAACAAGGTAGACCAGTGAGGCAGAAATACGTATCGGGGATATAGACCACGATTCCGCAG
 GGGCCCTCCACGCCAAAGACAGCCTAGAGAGGACGGCAATGATGAAGATAAAGAAAATCAAGGAGATGAGACCCA
 AGGTCAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAATTGCCGACGCAGACACCCAGAAAACCTTAAACC
 ACAAGATGGCAAAGAGACAAAAGCAGCCGATCCACCAGCTGAGAATTCGTCCACTCCTGAGGCTGAGCGGGGCAG
 GACTGAGTAAATGCCAGCTTACCATCTCTACCATCATCCGTTTTAGTCATCCAACAGGAAGAAATATGAAATTCC
 AGCTATAAGAAATGAACAAAAGATTGGAGCTGAAGACCTTAAGTGCTTGCTTTTTGCCCGTTGACCAGATAAATA
 GAACTATCTGCATTATCTATGCAGCATGGGATTTTTATTATTTTTTACCTAAAGACGTCCTTTTTGGTAATAACA
 AACGTGTTTTTTAAAAAAGCCTGGTTTTTTTCAATACGCCTTTAAAGG

WO 2004/030615

PCT/US2003/028547

2911/6881
FIGURE 2687

MRRPYGRRPQYSNPPVQGEVMEGADNQGAGEQGRPVQRNTYRGYRPRFRRGPPRQRQPREDEGNDKEDKENQGDDETO
GQQPPQRRYRRNFCRRRHPENPKPQDGKETKAADPPAENSSTPEAERGRTE

WO 2004/030615

PCT/US2003/028547

2912/6881
FIGURE 2688

GAAGAATAACCCCAGGAAGTACCTTCGCAGTATTCCAACCCCTCCTGTGCAGGGTGAAGTGATGGAGGGTGCTGAC
AACCAGGGTGCAGGAGAACAAGGTAGACCAGTGAGGCAGAATACGTATCGGGGATATAGACCACGATTCCGCAGG
GGCCCTCCACGCCAAAGACAGCCTAGAGAGGACGGCAATGATGAAGATAAAGAAAATCAAGGAGATGAGACCCAA
GGTCAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAATTGCCGACGCAGACACCCAGAAAACCTAAACCA
CAAGATGGCAAAGAGACAAAAGCAGCCGATCCACCAGCTGAGAATTCGTCCACTCCTGAGGCTGAGCGGGGCAGG
ACTGAGTAAATGCCAGCTTACCATCTCTACCATCATCCGGTTTAGTCATCCAACAGGAAGAAATATGAAATTCCA
GCTATAAGAAATGAACAATAGAACTATCTGCATTATCTATGCAGCATGGGATTTTATTATTTTACCTAAAGAC
GTCTCTTTTTTGTAATAACAAACGTGTTTTTT

WO 2004/030615

PCT/US2003/028547

2913/6881
FIGURE 2689

AGCGGTGGCTGCCGGGCGTGGTGTGCGGTGGGTGCGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTTCAGTT
GCCCCGCCATGGCTGAGCTGGATCCGTTTCGGCGCCCCCTGCCGGCGCCCCCTGGCGGTCCC GCGCTGGGGAACGGAGT
GGCCGGCGCCGGCGAAGAAGACCCGGCTGCGGCCCTTCTTGGCGCAGCAAGAGAGCGAGATTGCGGGCATCGAGAA
CGACGAGGCCCTTCGCCATCCTGGACGGCGGGCGCCCCGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGA
TGCTGTTGATGGAGTAATGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTT
ACAAGTGGATCGATTGCAGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAAATGGAACGCTTGGAAGC
CCTTGATGCCAATTCTCGGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGC
AAGACAGGACGAGCAGCTACAGAAAACAAAAGCAAACAACAGGGCAGCAGAAGAAGCCTTTGTAAATGACATTGA
CGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCAAGCAGGC
CAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCCGCTGGTGCACTGAAGAGCCACCCT
GTGGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAAATTATGTTGA
GTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTTCATTGTTTGTGATTGCATGTTTCCTTCCTTCAACTGT
GTTCTCCCTGGCATTAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAGCCTCAAC
CTGTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACGTGT

WO 2004/030615

PCT/US2003/028547

2914/6881
FIGURE 2690

MAELDPFGAPAGAPGGPALGNGVAGAGEEDPAAAF LAQQESEIAGIENDEAFAILDGGAPGPHGEPPGGPDAV
DGVMNGEYYQESNGPTDSYAAISQVDRLQSEPE SIRKWREEQMERLEALDANSRKQEA EWKEKAIKELEEWYARQ
DEQLQKTKANNRAAEEAFVND IDESSPGTEWERVERLCDFNPKSSKQAKDVSRMRSVLISLKQAPLVH

WO 2004/030615

PCT/US2003/028547

2915/6881
FIGURE 2691

GCCACCGCTGTGGTGTGCGGTGGGTGCGGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTCAGTTGCCCGCCA
TGGCTGAGCTGGATCCGTTGCGCGCCCCTGCCGGCGCCCCTGCGGTCCCGCGCTGGGGAACGGAGTGGCCGGCG
CCGGCGAAGAAGACCCGGCTGCGGCCTTCTTGCGCGAGCAAGAGAGCGAGATTGCGGGCATCGAGAACGACGAGG
CCTTCGCCATCCTGGACGGCGGGCGCCCCGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGATGCTGTTG
ATGGAGTAATGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTACAAGTGG
ATCGATTGCAGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAATGGAACGCTTGGAAGCCCTTGATG
CCAATTCTCGGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGCAAGACAGG
ACGAGCAGCTACAGAAAACAAAAGCAAACAACAGGGTGGCAGATGAAGCTTCTACAAACAACCCTTCGCTGACG
TGATTGGTTATGTCACAAACATAAACCATCCTTGCTACAGCCTAGAACAGGCAGCAGAAGAAGCCTTTGTAAATG
ACATTGACGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCA
AGCAGGCCAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCGCTGGTGCACTGAAGAG
CCACCCTGTGGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAATT
ATGTTGAGTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTTATTGTTTGTGATGTCATGTTTCCTTCCTT
CAACTGTGTTCTCCCTGGCATTGAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAG
CCTCAACCTGTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACGT

WO 2004/030615

PCT/US2003/028547

2916/6881
FIGURE 2692

MAELDPFGAPAGAPGGPAL'GNGVAGAGEEDPAAAFQAQQESEIAGIENDEAFAILDGGAPGQPHGEPPGGPDAV
DGVMNGEYYQESNGPTDSYAAISQVDRLOSEPESIRKWREEQMERLEALDANSRKQEAWEKKAIKELEEWYARQ
DEQLQKTKANNRVADEAFYKQPFADVIGYVTNINHPCYSLEQAEEAFVNDIDESSPGTEWERVERLCDFNPKSS
KQAKDVSRMRSVLISLKQAPLVH

WO 2004/030615

PCT/US2003/028547

2917/6881
FIGURE 2693

GCTTCTGTACTGCCAGGTCCGGGTCGGCGGGCTGCACTGCGGATGAGACCGGTGCGACTCATGAAGGTGTTTCGTCA
CCCGCAGGATACCCGCCGAGGGTAGGGTCGCGCTCGCCCGGGCGGCAGACTGTGAGGTGGAGCAGTGGGACTCGG
ATGAGCCCCATCCCTGCCAAGGAGCTAGAGCGAGGTGTGGCGGGGGCCCCACGGCCTGCTCTGCCTCCTCTCCGACC
ACGTGGACAAGAGGATCCTGGATGCTGCAGGGGCCAATCTCAAAGTCATCAGCACCATGTCTGTGGGCATCGACC
ACTTGGCTTTGGATGAAATCAAGAAGCGTGGGATCCGAGTTGGCTACACCCCAGATGTCCTGACAGATACCACCG
CCGAACTCGCAGTCTCCCTGCTACTTACCACCTGCCGCCGGTTGCCGGAGGCCATCGAGGAAGTGAAGAATGGTG
GCTGGACCTCGTGGGAAGCCCCCTCTGGCTGTGTGGCTATGGACTCACGCAGAGCACTGTCTGGCATCATCGGGCTGG
GGCGCATAGGCCAGGCCATTGCTCGGCGTCTGAAACCATTCCGGTGTCCAGAGATTTCTGTACACAGGGCGCCAGC
CCAGGCCTGAGGAAGCAGCAGAATTCCAGGCAGAGTTTGTGTCTACCCCTGAGCTGGCTGCCCAATCTGATTTC
TCGTCGTGGCCTGCTCCTTAACACCTGCAACCGAGGGACTCTGCAACAAGGACTTCTTCCAGAAGATGAAGGAAA
CAGCTGTGTTTCATCAACATCAGCAGGGGCGACGTCGTAAACCAGGACGACCTGTACCAGGCCTTGGCCAGTGGTA
AGATTGCAGCTGCTGGACTGGATGTGACGAGCCCAGAACCACTGCCTACAAACCACCCCTCTCCTGACCCTGAAGA
ACTGTGTGATTCTGCCCCACATTGGCAGTGCCACCCACAGAACCCGCAACACCATGTCCTTGTTGGCAGCTAACA
ACTTGCTGGCTGGCCTGAGAGGGGAGCCGATGCCTAGTGAAGCTCAAGCTGTAGCCAAACAGTAGAGATGGAGGGC
CGGGAAGCAAACCGTGCCCTGGTATTGTCAGACACACCCAGGCTTGATTTGGATCCACAGGCAGAGCCAAGGGAA
GGTGTGATTCTCTGAGGAAAGAGTGATTCTGATATATGTACTTGTACATTGGTGTGGACACATTTGCGCCAAA
AGTATGGTAATTCTATTATTAAATAATTCTCTGAG

WO 2004/030615

PCT/US2003/028547

2918/6881
FIGURE 2694

MRPVRLMKVFVTRRIPAEGRVALARAADCEVEQWDSDEPIPAKELERGVAGAHGLLCLLSDHVDKRILDAAGANL
KVISTMSVGIDHLALDEIKKRGIRVGYTPDVLTDTTAE LAVSLLLTTCRRLPEAIEEVKNGGWTSWKPLWL CGYG
LTQSTVGIIGLGRIGQAIARRLKPFQVQRFlytGRQPRPEEAAEFQAEFVSTPELAAQSDFIVVACSLTPATEGL
CNKDDFFQMKETAVFINISRGDVVNQDDLYQALASGKIAAAGLDVTSPEPLPTNHPLLTkncvILPHIGSATHR
TRNTMSLLAANNLLAGLRGEPMPSCLKL

WO 2004/030615

PCT/US2003/028547

2919/6881
FIGURE 2695

AGTGTGAAATCTTCAGAGAAGAATTTCTCTTTAGTTCTTTGCAAGAAGGTAGAGATAAAGACACTTTTTCAAAA
TGGCAATGGTATCAGAATTCCTCAAGCAGGCCTGGTTTATTGAAAATGAAGAGCAGGAATATGTTCAAACGTGA
 AGTCATCCAAAGGTGGTCCCGGATCAGCGGTGAGCCCTATCCTACCTTCAATCCATCCTCGGATGTCGCTGCCT
 TGCATAAGGCCATAATGGTTAAAGGTGTGGATGAAGCAACCATCATTGACATTCTAACTAAGCGAAACAATGCAC
 AGCGTCAACAGATCAAAGCAGCATATCTCCAGGAAACAGGAAAGCCCTGGATGAAACACTTAAGAAAGCCCTTA
 CAGGTCACCTTGAGGAGGTTGTTTTAGCTCTGCTAAAACTCCAGCGCAATTTGATGCTGATGAACCTCGTGCTG
 CCATGAAGGGCCTTGGAACGTGATGAAGATACTCTAATTGAGATTTTGGCATCAAGAACTAACAAGAAATCAGAG
 ACATTAACAGGGTCTACAGAGAGGAACGAAGAGAGATCTGGCCAAAGACATAACCTCAGACACATCTGGAGATT
 TTCGGAACGCTTTGCTTTCTCTTGCTAAGGGTGACCGATCTGAGGACTTTGGTGTGAATGAAGACTTGGCTGATT
 CAGATGCCAGGGCCTTGATGAAGCAGGAGAAAGGAGAAAGGGGACAGACGTAAACGTGTTCAATACCATCCTTA
 CCACCAGAAGCTATCCACAACCTTCGCAGAGTGTTTTAGAAATACACCAAGTACAGTAAGCATGACATGAACAAAG
 TTCTGGACCTGGAGTTGAAAGGTGACATTGAGAAATGCCTCACAGCTATCGTGAAGTGCGCCACAAGCAAACAG
 CTTTCTTTGCAGAGAAGCTTCATCAAGCCATGAAAGGTGTTGGAACCTCGCCATAAGGCATTGATCAGGATTATGG
 TTTCCCGTTCTGAAATTGACATGAATGATATCAAAGCATTCTATCAGAAGATGTATGGTATCTCCCTTTGCCAAG
 CCATCCTGGATGAAACCAAAGGAGATTATGAGAAAATCCTGGTGGCTCTTTGTGGAGGAACTAAACATTCCCTT
 GATGGTCTCAAGCTATGATCAGAAGACTTTAATTATATATTTTCATCCTATAAGCTTAAATAGGAAAGTTTCTTC
 AACAGGATTACAGTGTAGCTACCTACATGCTGAAAAATATAGCCTTTAAATCATTTTTATATTATAACTCTGTAT
 AATAGAGATAAGTCCATTTTTTAAAAATGTTTTCCCAAACCATAAAACCCTATACAAGTTGTTCTAGTAACAAT
 ACATGAGAAAGATGTCTATGTAGCTGAAAATAAAATGACGTCACAAGAC

WO 2004/030615

PCT/US2003/028547

2920/6881
FIGURE 2696

MAMVSEFLKQAWFIENEEQEYVQTVKSSKGGPGSAVSPYPTFNPSSDVAALHKAIMVKGVDEATI IDILTKRNNA
QRQQIKAAYLQETGKPLDETLKKALTGHLEEVVLALLKTPAQFDADELRAAMKGLGTDEDTLIEILASRTNKEIR
DINRVYREELKRDLAKDITSDTSGDFRNALLSLAKGDRSEDFGVNEDLADSDARALYEAGERRRKGTDVNVFNTIL
TTRSYPQLRRVFQKYTKYSKHD MNKVL DLELKG DIEKCLTAIVKCATSKPAFFAEK LHQAMKGVGTRHKALIRIM
VSRSEIDMNDIKAFYQKMYGISLCQAILDETKGDYEKILVALCGGN

WO 2004/030615

PCT/US2003/028547

2921/6881
FIGURE 2697

TTTCCGCGCTACCTACAGAGGGGCCCATACGGCGTTGTTCTGGATTCCCGTCGTAACCTAAAGGGAACTTTCAC
AATGTCCGGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTT
AGGTGGCACCAATCTTGACTTCCAGATGGAACAGTACATCTGTAAAAGGAAAAGTAATGGCATCTATATCATAAA
TCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTAGTGCTATTGTTGCCATTGAAAACCCTGCTGATGTCAG
TGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGC
TGGCCACTTCACTCCTGGAACCTTCACTAACCCAGATCCAGGCAGCCTTCCGGGAGCCATGGCTTCTTGTGGTTAC
TGACCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTGTGTAACAC
AGATTCTCCTATGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTGGGTTTGATGTG
GTAGATGCTGGCTCGGGAAGTTCTGCGCATGTGTAGCACGATTTCTATGACCACCCGTGGGAGGTCATGCCTGA
TCTCTACTTCTACAGAGATCCTGAAGATATTGAAAAAGAAGAGCAGGCTGCTGCTGAAAAGGCAGTGACCAAGGA
GGAATTTCAGGGTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGA
AGGTGTACAGGTGCCCTCTGTGCCATTTCAGCAGTTCCTACTGAAGACTGGAGCGCTCAGCCTGCCACGGAAGA
CTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGGGTAGGAGCAACCACTGACTGGTCTTAAGCTGTTCTTGC
ATAGGCTCTTAAGCAACATGGAAAAATGGTTGATGGAAAATAAACATCAGTTTCT

WO 2004/030615

PCT/US2003/028547

2922/6881
FIGURE 2698

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYICKRKSNNGIYIINLKRTWEKLLLAASAIVAIENPADVS
VISSRNTGQRAVLKFAAATGATPIAGHFTPGTFTNQIQAAFREPWLLVVDPRADHQPLTEASYVNLPTIALCNT
DSPMRYVDIAIPCNNKGAHSVGLMWRMLAREVLRMCSTISYDHPWEVMPDLYFYRDPEDIEKEEQAAAEKAVTKE
EFQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWSAQPATDWSAAPTQAQATEWVGATTDWS

WO 2004/030615

PCT/US2003/028547

2923/6881
FIGURE 2699

CAGAGGGGCCCATAACGGCGTTGTTCTGGATTCCCGTCGTAACTTAAAGGGAACTTTCACAATGTCCGGAGCCCT
TGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGACAGCAGGAACCCACTTAGGTGGCACC AATCT
TGACTTCCAGATGGAACAGTACATCTGTAAAAGGAAAAGTAATGGCATCTATATCATAAATCTGAAGAGGACCTG
GGAGAAGCTTCTGCTGGCTTCACTCCTGGAACCTTACTAACCAGATCCAGGCAGCCTTCCGGGAGCCATGGCTT
CTTGTGGTTACTGACCCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCT
CTGTGTAACACAGATTCTCCTATGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTG
GGTTTGATGTGGTAGATGCTGGCTCGGGAAGTTCTGCGCATGTGTAGCACGATTTCTATGACCACCCGTGGGAG
GTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGATATTGAAAAAGAAGAGCAGGCTGCTGCTGAAAAGGCA
GTGACCAAGGAGGAATTTCAAGGTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCA
GACTGGTCTGAAGGTGTACAGGTGCCCTCTGTGC

WO 2004/030615

PCT/US2003/028547

2924/6881
FIGURE 2700

GGGAAACTTTTACAATGTCCGGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCA
CAGGAACCCACTTAGGTGGCACCATCTTGACTTCCAGATGGAACAGTACATCTGTAAAAGGAAAAGTAATGGCA
TCTATATCATAAATCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTAGTGCTATTGTTGCCATTGAAAACC
CTGCTGATGTCAGTGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAG
CCACTCCAATTGCTGGCCACTTCACTCCTGGAACCTTCACTAACCAGACACGGAGGCATCTTATGTTAACCTACC
TACCATTGCTCTGTGTAACACAGATTCTCCTATGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGC
TCACTCAGTGGGTTTGATGTGGTAGATGCTGGCTCGGGAAGTTCTGCGCATGTGTAGCACGATTTCTATGACCA
CCCGTGGGAGGTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGATATTGAAAAAGAAGAGCAGGCTGCTGC
TGA

WO 2004/030615

PCT/US2003/028547

2925/6881
FIGURE 2701

GGCACGAGGGCCAGGAACGCCAGCCGTTACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC
CATGGACGCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT
ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC
CAAGATTATTAACAATACAGAGAATCTTGTCGGGAATTGCTAGCTGTTCCAGACAACATAAGGTGATTTTCT
GCAAGGAGGTGGGTGCGGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA
CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCA
CCCTAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA
TTATTGCGCAAATGAGACGGTGCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG
TGACATGTCTCAAACCTCCTGTCCAAGCCAGTGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCAGAA
GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCC
CTCGGTCTGGAATACAAGGTGCAGGCTGGAAACAGCTCCTTGTAACACGCTCCATGTTTCAGCATCTACGT
CATGGGCTTGGTTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGCCATGGAGAAGCTTAGCTCCATCAAATC
TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTGTCTGTGGGAGGCATCCGGGCCTCTCTGTA
TAATGCTGTCACAATTGAAGACGTTCAGAAGCTGGCCGCTTCATGAAAAAATTTTTGGAGATGCATCAGCTATG
AACACATCCTAACCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAA
AAGTTAACACAGTATTTTTCTCAAATGAACATGTTTATTGCAGATTCTTCTTTTTTGAAAGAACAACAGCAAAAC
ATCCACAACCTCTGTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAACGGAAGCATTTTAAGAAAT
CTTGTTGCTTTTCTAACAAATCCCGCGTATTTTGCCTTTGCTGCTACTTTTTCTAGTTAGATTTCAAACCTTGCC
TGTGGACTTAATAATGCAAGTTGCGATTAAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGG
CCCTCTAGGTGCTGAATCTACACATCTGTGGGGTCTCCTGGGTTACGCGGCTGTTGATTCAAGGTCAACATTGAC
CATTGGAGGAGTGGTTTAAGAGTGCCAGGCGAAGGGCAAACCTGTAGATCGATCTTTATGCTGTTATTACAGGAGA
AGTGACATACTTTATATATGTTTATATTAGCAAGGTCTGTTTTAATACCATATACTTTATATTTCTATACATTT
ATATTTCTAATAATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAAATCCTTGACCTTGTCAT
TATAGCATTCCATTAGCAAGAGTTGTACCCCTCCCCAGTCTTCGCCTTCCTCTTTTAAGCTGTTTTATGAAAA
AGACCTAGAAGTTCTTGATTCATTTTTACCATTCTTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTT
TCAATTATGCCATTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGT
ATGACTACGAGAGTGATACTTTGCTGAAAAGTCTTCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAAT
ATGTAAAGAACATTAAAGTCCTAAACATCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2926/6881
FIGURE 2702

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNNTENLVRELLAVPDNYKVIFL
QGGGCGQFS AVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLGFALRECP
SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVSVGGIRASLY
NAVTIEDVQKLA AFMKKFL EMHQL

WO 2004/030615

PCT/US2003/028547

2927/6881
FIGURE 2703

GGCACGAGGGCCAGGAACGCCAGCCGTTACGCGTTCGGTCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC
CATGGACGCCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT
ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC
CAAGATTATTAACAATACAGAGAATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACATAAGGTGATTTTTCT
GCAAGGAGGTGGGTGCGGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA
CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGAGAAGAAGCAAGAAGTTTGGGACTATAAATATCGTTCA
CCCTAAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA
TTATTGCGCAAAATGAGACGGTGTCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG
TGACATGTCTCTCAAACTTCTGTCCAAGCCAGTGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCAGAA
GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCC
CTCGGTCTTGAATACAAGGTGCAGGCTGGAACAGCTCCTTGTAACACGCCTCCATGTTTCAGCATCTACGT
CATGGGCTTGGTTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGGCCATGGAGAAGCTTAGCTCCATCAAATC
TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTTTGTCCAGTGGAGCCCCAAAATAGAAGCAA
GATGAATATTCCATTCCGCATTGGCAATGCCAAAGGAGATGATGCTTTAGAAAAAGATTTCTTGATAAAGCTCT
TGAACCTCAATATGTTGCTCTGAAAGGGCATAGGTCTGTGGGAGGCATCCGGGCCTCTCTGTATAATGCTGTAC
AATTGAAGACGTTCAGAAGCTGGCCGCCTTCATGAAAAAATTTTGGAGATGCATCAGCTAT**GA**ACACATCCTAA
CCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAAAAGTTAACACAG
TATTTTTCTCAAATGAACATGTTTATTGCAGATTCTCTTTTTTGAAAGAACAACAGCAAAACATCCACAACCTCT
GTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAACCTGGAAGCATTTTAAGAAATCTTGTTGCTTTT
CTAACAAATTCCCGCGTATTTTGCCTTTGCTGTACTTTTTCTAGTTAGATTTCAAACCTTGCTGTGGACTTAAT
AATGCAAGTTGCGATTAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGGGCCCTCTAGGTGC
TGAATCTACACATCTGTGGGTCTCCTGGGTTTACGCGGCTGTTGATTCAAGGTCAACATTGACCATTTGGAGGAGT
GGTTTAAAGAGTGCCAGGCGAAGGGCAAACCTGTAGATCGATCTTTATGCTGTTATTACAGGAGAAAGTGACATACTT
TATATATGTTTATATTAGCAAGGTCTGTTTTTAATACCATATACTTTATATTTCTATACATTTATATTTCTAATA
ATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAATCCTTGACCTTGTCATTATAGCATTCCA
TTAGCAAGAGTTGTACCCCTCCCGAGTCTTCGCCTTCTCTTTTAAAGCTGTTTTATGAAAAAGACCTAGAAGT
TCTTGATTCATTTTTACCATTCTTTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTTCAATTATGCCA
TTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGTATGACTACGAGA
GTGATACTTTGCTGAAAAGTCTTTCCCCTATTGTTTATCTATTGTGAGTATTTTATGTTGAATATGTAAAGAACA
TTAAAGTCCTAAACATCTAAAAA

WO 2004/030615

PCT/US2003/028547

2928/6881
FIGURE 2704

MDAPRQVVNF GPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNNTENLVRELLAVPDNYKVIFL
QGGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLGLGFAALRECP
SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVCPVEPQNRSK
MNIPFRIGNAKGDDALEKRFLDKALELNMLSLKGHRVGGIRASLYNAVTTIEDVQKLAAFMKKFLEMHQL

WO 2004/030615

PCT/US2003/028547

2929/6881
FIGURE 2705

ATGGTGGAAAAGGAGCAAAGACATAGTCGGAATGAATGGGAAGGTTGGTATAATGGACCCAAATCTCTTGTTTCA
AAACAAGTTAAGGAAAATTGTTTTAAAAATCCTAAACACTCAGTCTGTGAATATGATCCTGGGTCCTCTCAGAAC
TGCCAACATTCTAACACCAGCTGGCACCAGAGACCCTGCTCTGAGGTGAGGGATGATGTGAGCAAGTGGTCTAAT
AATTCTCAGAACTCTTTTTCTCATTCTTCTTCCCTCTCTTCCCTCTTCTGCCTTACCAAGAACAGAGAAATGGTC
TTTCTTAAAGAAGAAGAAAAGAGGACTCCAACCGTAAGAATTGAGTACAAGGAGTTGCTCAGTGATGTGAAGCTG
AAGAGGGCATCTGAGGAGATGAGCTGTAAAACATATTACAAGAGGGACGTGTGAAGGGAGTGACCATTCCGAAG
AACCCAGACAGCTGCCCACAGGAGAAGGATGCCATCCCAAAGATGAATCAGAGTTTCCATGAGCAAAAGAGCCTT
GTGAGTCGTCGGCAAAGCCTGAGTCCTGTCTTTTCGCTCTCTCTCCCCGACAGTATGAGCTTCACCACTCGCTCC
ACCTTCTCCACCAACTACCGGTCCCTGGGCTCTGTCCAGGCGCCAGCTACGGCGCCCCGGCCTATAGACAATGCC
CATCTTGCTGCTGATGACTGTAGAGTCAAGTATGAGACAGAAGTGGCCATGCACCACTCTGTGGAGAAAGACATC
CATGGGCTCCACAAGGTTCATCGATGACACCAATGTCACTTGGCTGCAGGTGGAGACACAGATCGAGGCTCTCAAG
GAGGAGCTCTTTCATGAAGAAGAACCACGAATAGGAAATAAAAGGCCACAAAGCTCAGATTGCCAGCTCTGGGTT
GACAGTGGAGTGGTCCCCATGCAGCCCGCCAAGGTGCGAGCTGCTGAGATGATGCTCACTGAGCCGAGATGCACA
GTCCAGTCTTCGGAGGTGACCTGGAATCGATGAGAAATCTGAAGGCTAGCTTGGGGAACAGCCTGAGGGAGGTG
GAGGCCTGCTACACCGTGAAGATGGAGCAGCTCGACGGAATCGTGCCACACTTGGAGTCAGAGCTGGCACAGACC
TGGGCAGAGGAACAGTGCCAGGCCAGCAGTACGAGGCCCTGATGAACATCAAGGTCAAGTTGGAGGCTGAGATC
ACCACCTACTGCTGCCTGCTGAAAGATGGCGAGGACGTCAATCTTGGTGATACCCTGGACAGCAGCAACTCCATG
CAAACCATCCAAAAGACCACCCTGCCAGACAGTGGATGGCAAAGTGGTGTCTGAGACCAAAGATACCAAAGTT
CTGAGGCATTACACCAGCAGAAATTACAACCTGCATGGCCCAGGAAAGGCGCAATGGCAAAGAAACAGGAAGTGAT
TCTTACAGTGGGGAACCCCTGGAAGCTGAGGATGCCAAAGCCGTAAGACTTAACATCTCCAAGTCATCATTTCGAG
GTGTTAATGCTGGAAGCTACAGAGAAGATGACAGGTTCCCTCATTAAATGTGA

WO 2004/030615

PCT/US2003/028547

2930/6881

FIGURE 2706

MVEKEQRHSRNEWEGWYNGPKSLVSKQVKENC FKNPKHSVCEYDPGSSQNCQHSNTSWHQRPCSEVRDDVSKWSN
NSSELFFSFFFPLFLFCLTKNREMVFLKEEEKRTPTVRIEYKELLSDVKLKRASEEMSCKTYSQEGRVKGV TIPK
NPDSCPQEKDAIPKMNQSFHEQKSLVSRRQSLSPVLSLSSPDSMSFTTRSTFSTNYRSLGSGVQAPSYGARP IDNA
HLAADD CRVKYETELAMHQSVEKDIHGLHKVIDDTNVTWLQVETQIEALKEELFHEEEPRIGNKRPTSSDCQLWV
DSGVVPMQPAKVGAAEMMLTEPRCTVQSSEVDLES MRNLKASLGNSLREVEACYTVKMEQLDGIVPHLESELAQT
WAAEQCQAQQYEALMNIKVLEAEITTYCLLKDGEDVNLGDTLDSSNSMQTIQKTTTCQTVDGKVVSETKDTKV
LRHYTSRNYNCMAQERRNGKETGSDSYSGEPLAEDAKAVRLNISKSSFEVLMLEATEKMTGSSLM

WO 2004/030615

PCT/US2003/028547

2931/6881
FIGURE 2707

ACAGAGCCCCGGCCGCCAGAGCGATGTTCCCGCAGAGCCGGCACCCGACGCCGCACCAGGCTGCAGGCCAGC
CCTTCAAGTTCACTATCCCGGAGTCCCTGGACCGGATTAAAGAGGAATTCCAGTTCCTGCAGGCGCAGTATCACA
GCCTTAAATTGGAATGTGAGAACTGGCAAGTGAAAAGACAGAAATGCAGAGGCACTATGTGATGTATTATGAAA
TGTCATATGGATTAAACATTGAAATGCACAAACAGACTGAAATCGCCAAGAGATTGAATACGATTTGTGCACAAG
TCATCCCATTCTGTCTCAGGAACATCAACAACAGGTGGCCCAGGCTGTTGAACGTGCCAAACAGGTGACCATGG
CAGAATTGAATGCCATCATCGGGCAGCAGCAGTTGCAAGCTCAGCATCTTTCTCATGGCCACGGACCCCCAGTTC
CCCTTACGCCTCACCCCTTCGGGACTTCAGCCTCCTGGAATCCCGCCCCCTCGGGGGCAGTGCCGGCCTTCTTGCGC
TGTCTAGTGCTCTGAGTGGGCAGTCTCACTTGGAATAAAAGATGACAAGAAGCACCACGATGCAGAGCACCACA
GAGGTGAGAGGCCGGGCAAGAGTAATTCCCTCCTGGTCCCAGACAGTCTAAGAGGCACAGATAAACGCAGAAATG
GACCTGAATTTTCCAATGACATCAAGAAAAGGAAGGTGGATGATAAGGACTCCAGCCACTATGACAGTGATGGTG
ACAAAAGCGATGACAACTTAGTTGTGGATGTGTCTAATGAGGACCCCTTCTTCTCCGCGAGCAAGCCCTGCCCACT
CGCCCCGGGAAAATGGAATCGACAAAAATCGCCTGCTAAAGAAGGATGCTTCTAGCAGTCCAGCTTCCACGGCCT
CCTCGGCAAGTTCCACTTCTTTGAAATCCAAAGAAATGAGCTTGCAATGAAAAAGCCAGCACGCCTGTTCTGAAAT
CCAGCACACCAACGCCCTCGGAGCGACATGCCAACGCCGGGCACCAGCGCCACTCCAGGCCTCCGTCCAGGTCTCG
GCAAGCCTCCAGCCATAGACCCCTCGTTAACCAAGCGGCAGCTGGCTTGAGGACACCCCTGGCAGTGCCCGGCC
CATATCCTGCTCCTTTTGGGATGGTCCCCACGCTGGCATGAACGGCGAGCTGACCAGCCCAGGCGCTGCCTACG
CCAGTTTACACAACATGTCGCCCCAGATGAGCGCCGACGCCGCCGCGGCCGCGCTGGTGGCCTACGGGCGCTCCC
CCA'TGGTGGGGTTTGATCCTCCCCCTCACATGAGAGTACCTACCATTCTTCCAAACCTGGCAGGAATCCCTGGGG
GGAAACCTGCATACTCCTTCCACGTTACTGCAGACGGTCAGATGCAGCCTGTCCCTTTTCCCCCGACGCCCTCA
TCGGACCCGGAATCCCCCGGCATGCTCGCCAGATCAACACCCCTCAACCACGGGGAGGTGGTGTGCGCTGTGACCA
TCAGCAACCCACGAGACACGTGTACACAGGCGGGAAGGGCTGCGTCAAGGTCTGGGACATCAGCCACCCTGGCA
ATAAGAGCCCTGTCTCCAGCTCGACTGTCTGAACAGAGACAATTATATCCGTTCTCTGTAAATTGCTACCCGATG
GCTGCACTCTCATAGTGGGAGGGGAAGCCAGTACTTTGTCCATTGGGACCTGGCGGCTCCAACCCGCGCATCA
AGGCGGAGCTGACGTCTCGGCCCCCGCTGCTACGCCCTGGCCATCAGCCCCGATTCCAAGGTCTGCTTCTCAT
GCTGCAGCGACGGCAACATCGCTGTGTGGGATCTGCACAACCAGACACTAGTGAGGCAATTCCAGGGCCACACAG
ACGGAGCCAGCTGTATTGACATTTCTAATGATGGCACCAGCTCTGGACGGGTGGTTTGGACAACACAGTCAGGT
CCTGGGACCTGCGCGAGGGGCGGCAGCTGCAGCAGCAGACTTCACCTCCCAGATCTTCTCCCTGGGGTACTGCC
CCACCGGGGAGTGGCTGGCAGTGGGCATGGAGAGCAGCAATGTGGAGGTGCTGCACGTGAACAAGCCTGACAAGT
ACCAGCTGCACCTGCATGAGAGCTGCGTGCTGTCCCTGAAATTTGCTTACTGTGGTAAATGGTTTGTGAGTACTG
GAAAAGATAACCTCCTCAATGCTTGGCGGACCCCTATGGAGCCAGCATATTCCAGTCCAAAGAGTCTCTGTCAG
TGCTTAGCTGTGACATCTCTGTGGATGATAAGTACATAGTCACTGGCTCGGGGGACAAGAAGGCTACAGTCTATG
AAGTCATCTACTGAAAACATTATGTGGT

WO 2004/030615

PCT/US2003/028547

2932/6881

FIGURE 2708

CGGCAGTCTCGCGCGGCTACTGCAGCACTGGGGTGTCA GTTGTGGTCCGACCCAGAACGCTTCAGTTCTGCTCT
GCAAGGATATATAATAACTGATTGGTGTGCCCCGTTTAATAAAAAGAATATGGAAGCTGAACAGCCAGAAGAAACCT
TCCCTAACACTGAAACCAATGGTGAATTTGGTAAACGCCCTGCAGAAGATATGGAAGAGGAACAAGCATTAAAA
GATCTAGAAACACTGATGAGATGGTTGAATTACGCATTCTGCTTCAGAGCAAGAATGCTGGGGCAGTGATTGGAA
AAGGAGGCAAGAATATTAAGGCTCTCCGTACAGACTACAATGCCAGTGTTTCAGTCCCAGACAGCAGTGGCCCCG
AGCGCATATTGAGTATCAGTGCTGATATTGAAACAATTGGAGAAATTCGAAGAAAATCATCCCTACCTTGGAAAG
AGGGCCTGCAGTTGCCATCACCCTGCAACCAGCCAGCTCCCGCTCGAATCTGATGCTGTGGAATGCTTAAATT
ACCAACACTATAAAGGAAGTGACTTTGACTGCGAGTTGAGGCTGTTGATTTCATCAGAGTCTAGCAGGAGGAATTA
TTGGGGTCAAAGGTGCTAAAATCAAAGAAGCTTCGAGAGAACACTCAAACCACCATCAAGCTTTTCCAGGAATGCT
GTCTCTATCCACTGACAGAGTTGTTCTTATTGGAGGAAAACCCGATAGGGTTGTAGAGTGCATAAAGATCATCC
TTGATCTTATATCTGAGTCTCCCATCAAAGGACGTGCACAGCCTTATGATCCCAATTTTTACGATGAAACCTATG
ATTATGGTGGTTTTACAATGATGTTTGATGACCGTCGCGGACGCCAGTGGGATTTCCCATGCGGGGAAGAGGTG
GTTTTGACAGAAATGCCTCCTGGTCGGGGTGGCGCTCCCATGCCTCCATCTAGAAGAGATTATGATGATATGAGCC
CTCGTCGAGGACCCTCCCCCTCCTCCCGGACGAGGCGGGCGGGGTGGTAGCAGAGCTCGGAATCTTCCTCTTC
CTCCACCACCACCACCTAGAGGGGAGACCTCATGGCCTATGACAGAAGAGGGAGACCTGGAGACCGTTACGACG
GCATGGTTGGTTTCAGTGCTGATGAACTTGGGACTCTGCAATAGATACATGGAGCCCATCAGAATGGCAGATGG
CTTATGAACCACAGGGTGGCTCCGGATATGATTATTCCTATGCAGGGGGTGGTGGCTCATATGGTGATCTTGGTG
GACCTATTATTACTACACAAGTAAGTATTCCCAAAGATTTGGCTGGATCTATTATTGGCAAAGGTGGTCAGCGGA
TTAAACAAATCCGTGATGATCGGGAGCTTCGATCAAAATTGATGAGCCTTTAGAAGGATCCGAAGATCGGATCA
TTACCATTACAGGAACACAGGACCAGATACAGAATGCACAGTATTTGCTGCAGAACAGTGTGAAGCAGTATGCAG
ATGTTGAAGGATCTAAATGCAAGATATTTTTCTTTTTTATAGTGTGAAGCAGTATTCTGGAAAGTTTTCTAAG
ACTAGTGAAGAACTGAAGGAGTCCCTGCATCTTTTTTTTTTATCTGCTTCTGTTTAAAAAGCCAACATTCCTCTG
CTTCATAGGTGTTCTGCATTTGAGGTGTAGTGAAATCTTGTGTTTACCAGATGTAATGTTTTAGTTCCTTACA
AACAGGGTTGGGGGGGGGAAGGGCGTCAAAAATAACATTGAAATTTTGAACAGCAGCAGAGTGAGTGGATTT
TATTTTTCGTTATTGTTGGTGGTTTTAAAAAATCCCCCATGTAATTATTGTGAACACCTTGCTTTGTGGTCACT
GTAACATTTGGGGGGTGGGACAGGGAGGAAAAGTAACAATAGTCCACATGTCCCTGGCATCTGTTTACAGCAGTG
TGCAGAATGTAATGCTCTTTTGTAAAGAACGTTTTATGATTTTTAAAAATAAATTTAGTGAACCTATTTTTGGTGG
TCATTTTTTTTTTAAGACAGTCATTTTAAATGGTGGCTGAATTTCCCAACCCACCCCAACTAAACACTAAGT
TTAATTTTTCAGTCTCTGTTGGACATATAAGTGCATCTCTGTTGGACATAGGCAAAATAACTTGGCAAACCTTA
GTTCTGGTGATTTCTTGATGGTTTGAAGTCTATTGCTGGGAAGAAATTCATCATACATATTATGCTTATAAT
AAGCTGGGGATTTTTGTTTGTGTTTGGCAAATGCTTGGCCCTACTTTTCAACAATTTCTATGTTAGTTGTGAAG
AACTAAGGTGGGGAGCAGTACTACAAGTTGAGTAATGGTATGAGTATAACCAGAATTCTGATTGGCAGCAAGTT
TATTAATCAGAATAACACTTGGTTATGGAAGTACTAATGCTGAAAAAATTGATTATTTTTATTAGATAAATTTCT
CACCTATAGACTTAACTGTCAATTTGCTCTAGTGTCTTATTAGTTAACTTTGTAAATATATATATACTTGT
TTTCCATTGTATGCAATTGAAAGAAAAAGATGACCATTCTCTGTTGTATGTTGGATTAGTAGGAATGTTTG
TGTACAATTCAAAAAAGATGAAAAAGTTCTGTGGATGTTTTGTGTAGTATCTTGGCATTGTATTGA
TAGTTAAATTCACCTTCCAAATAAATAAACACCCATGATGCTAG

WO 2004/030615

PCT/US2003/028547

2933/6881
FIGURE 2709

METEQPEETFPNTETNGEFGKRPAEDMEEEQAFKRSRNTDEMVELRILLQSKNAGAVIGKGGKNIKALRTDYNAS
VSVPDSSGPERILSISADIETIGEILKKIIPITLEEGLQLPSPTATSQLPLESDAVECLNYQHYKGSDFDCELRL
IHQSLAGGIIGVKGAKIKELRENTQTTIKLFQECCPHSTDRVVLIGGKPD RVVECIKIILDLISESPIKGRAQPY
DPNFYDETYDYGGFTMMFDDRRGRPVGFPMRGRGGFDRMPFGRGGRPMPPSRDYDDMSPRRGPPPPPPGRGGRG
GSRARNLPLPPPPPPRGDL MAYDRRGRPGDRYDGMVGF SADETWDSAIDTWSPSEWQ MAYEPQGGSGYDYSYAG
GRGSYGDLGGPIITTQVTIPKDLAGSIIGKGGQRIKQIRHESGASIKIDEFLEGS EDRIITITGTQDQIQNAQYL
LQNSVKQYADVEGF

WO 2004/030615

PCT/US2003/028547

2934/6881
FIGURE 2710

AAAAAGGAAGTGGGAGCGCGCCGCGGCGGTTCTGTCTTACAGTTGCGCTGCCAGGGACCGATGTTGCGCGAG
GAAAATGCGGGACGCCAGGTGCGTGCTCGGCCAGACTTATGCCCGTGTTCACAGCCACACTCGTGCCCGA
AGCCCCCTTACCCGCCCCGGGCTGTGGTCTGTGGGCTGTGGGACGAGCTGCGGCGCGGGCCATTTCTGAGCAGTG
GAGGTTTCAAGTAATCCACTAACAACAGTTCCAAATCTGTCTCATCAATCTGTGCTGCTGTTCTCTGTTGGTAA
TAGATGCATATTATTTCTTTTATTTAAAGAAATGAATGTGACTAGTATTGCATTAAGAGCTGAAACTTGGCTTT
TAGCTGCATGGCATGTTAAAGTACCTCCGATGTGGCTGGAAGCTTGTATTAAGTGGATTCAAGAAGAAAATAATA
ATGTTAACTTGAGTCAGGCCCAAATGAATAACAAGTGTGTGAGCAGTGGCTCCTTACTGATCTGAGGGATTGG
AGCATCCTCTTTTACCCGATGGCATTTTAGAAATTCAAAAGGAGAATTAATGGATTTTATGCTCTGCAGATTA
ATTCTTGGTTGATGTAAGTCAGCCTGCATACTCCAGATACAGAAGTTGAGAGGAAAAGAATACAACAAATGATC
TAGTTACAGCTGAAGCACAAGTAACCCCAAACCTTGGGAAGCAAAGCCTTCACGAATGTTGATGCTGCAGCTAA
CTGATGGAATCGTACAAATACAGGGAATGGAATATCAGCCTATTCCAATTCTTCATAGTGATCTTCTCCAGGTA
CAAAAATTTTGATTTATGGAATATATCTTTCCGCTTGTGTTCTCTTATTGAAACCAGAAAACGTGAAAGTGT
TAGGAGGTGAAGTAGATGCTCTTTTAGAAGAATATGCCAAGAAAAGTACTTGCAAGATTAATAGGGGAACCTG
ATCTTGTAGTTTCAGTCATACCAACAATTCTAACGAAAACATTCCCAGAGTTACAGATGTTCTAGATCCTGCAT
TAGGTCTTCTGATGAAGAACTCTTGGCAAGTCTTGATGAAAATGATGAGCTTACAGCAAATAATGACACTTCTT
CAGAACGATGTTTACCACAGGTAGTTCTCAAATACCATTCCCACAAGACAGTCAAGTTTTGAGCCAGAATTTG
TTATTTCTCCAAGACCAAAAGAGGAACCATCAACCTATCTATACATGTAATGGATGGAGAATTAGATGACTTTT
CACTGGAGGAGGCTTTGCTTTTAGAAGAACTGTCCAGAAAAGACAGATGGAAGTAAAGGAATTGCAACCATTTGA
CTTTTAACAGAAATGCCGATCGAAGTATAGAGAGATTTTACATAATCCTAATACTACGAATAACTTTTCTTTGA
CTTGCAAAAATGGAACAATAATTGGAGTGAAAAAATGTATCTGAACAAATGACTAATGAAGACAAATCATTG
GTTGTCCATCTGTTAGAGACCAAAACAGGAGTATTTTTTCAGTTTCAATTGTAATGTACCCTTAGCCCATGATTTTA
CAAATAAAGAAAAGAACTTAGAGACAGATAATAAAATAAAACAAACCAGCAGTTCAGATAGCCATTCTTAAATA
ATAAAATATTAAATAGAGAGGTGGTCAACTATGTACAGAAAAGGAATTCACAAATTTCTAATGAAAATGATTGTA
ATTTACAGAGTTGTCTTTAAGATCATCAGAGAATAGCATTAACTTTCTATTGCCATGGATTTGTATTCTCCAC
CCTTTGTCTATTTGTCTGTTCTAATGGCCAGCAAACCAAAGGAAGTTACAACAGTGAAAGTGAAAGCATTATTG
TAACCTTAAGTGGAAATCTCTCAAGTTCTGGTGGTATTTGGAGTATAACTGCAAAGGTGTCTGATGGTACTGCAT
ATCTAGATGTAGACTTTGTGGATGAAATACTTACTAGCTTGATAGGGTTCTCAGTACCAGAAATGAAACAGTCAA
AAAAGGATCCTCTTCAATACCAAAAGTTTCTGGAAGGGTTGCAGAAATGTCAAAGAGATCTAATAGATTTGTGCT
GTCTAATGACTATTTTCAATTAATCCTTCTTGTCTAAAGCAATGGTACTGGCATTACAAGATGTTAATATGGAAC
ACCTTGAGAAATCTAAAGAAGCGGTAAATAAATAATTAAGTAAATAGTATTAGGAACAATTAACAAACAAAG
GAAATATTTAGAAATTTGTTCACAATTTTACTTATGATACTTTGTGTAAAAAGGAAAAATGAAATTTCATAGCTTA
TTTCAGTTTAAATTTTAAAGTGTAAATCATGTTTGTATATGTGGAGCTTTTGAATAAGTTAATCTTTTTTTT
TTTTTTTTTAAATGTCAGGGTATTGCTCTGTTGCCAGGCTAGAGTGCAGTGGCATGATCATAGGTTATTGCATCA
ACCTCTTGAGCTCAAGCGATCCTCCTGCCTTAGCCTCTTGAGTTGCTGGGACTATAGGCATGTACCACCATGCC
AGCTAATTTATAATTACTATTATTGTTTTGTAGGGACAGAGTTTTGCTATGTTGCCAGATTGGTCTCAAACCTC
TGGCCTCTCACTCCTGCCGTATGGCCTCCAAAGTTTACTTTTTTAAAGTAACTGTTAGATGGAGGAATATGG
TGACCCACTATTGTTGAGAAATTTGTTTTCCACTTGTACGTCACATAAGATGATTGCTAAAATATTGTACTGGT
GTTGCGTGGTGAGTCATATTTTGAAGTTAATAATTATAAATAGGTAATTTCTTCTAATATGTTGGTACTGTC
TATGGCCATACCAACCTGAACATGCCTGAGCTTGTACATAATATGTTGAGTACCCAAAAGATTTGTTTTATATTGTT
AATCTTAGGGAAAAAAATTAATCCAGTAGATCAGAACATCAGGCTTTCAGATACAAATGATTTACTGGTTT
TTATTTTGTGATTATAATATTGGTATATTAAAGTAACTAGTTAACTAGATGCTATTTTATAGATTATATTG
AATGATTTAAACTTTATTTTCAAGGATAGTTTATTTTAAATGGCATATTGAAACATCATTATTAAGATCCAGT
AGGTAGGACATTATTGGATTAAATGAAGCATTTATCTATGTCTTAGGTGTCATTGTTCCCTTTCTGAATTAG
CTGTACATATAAGCCTTCTTTGGTTTTAAAGTACTGATTTTTTTTTTAAAAAAGAGGGACTGTTTACCATTCTT
CCACTGTGCTGTATAAAGTTGTATTTGAAAGGTAATGTTGTTTTTTATTAATCTTTTGTCTTAAATAATTTAA
GTGCTTTGAATTTTAAACATTAAACAAATCCTTAAATAAC

WO 2004/030615

PCT/US2003/028547

2935/6881
FIGURE 2711

TGCTCCGGAGGGCACGGGCTCCGTAGTCACCAACTGCAAGGCCCCCTCCCCCTGCGGGCGCTCCCCCTGGCACAAT
TCGCGTTTCGAGAGTGACCTGCACTCGCTGCTTCAACTGGATGCACCCATCCCCAATGCACCCCCTGCTCGCTGGC
AGCGCAAAGCCAAGAAAGCCACAGGCCCGGCCCCCTCACCCATGCGGGCCGCCAACCGATCCCACAGCGCCAGCA
GGACTCCGGGCGCAACTCCTGGCAAATCCAGTTCCAAGGTTGAGACCACTCCTAGCAAACCTGGCGGTGACCGCT
ATATCCCCCATCGCAGTGCTGCCAGATGGAGGTTGCCAGCTTCCTCCTGAGCAAGGAGAACCAGCCTGAAAACA
GCCAGACGCCACCAAGAAGGAACATCAGAAAGCCTGGACTTTGAACCTGAACGGTTTTGATGTAGAGGAAGCCA
AGATCCTTCGGCTCAGTGGAACACAAAATGCGCCAGAGGGTTACCAGAACAGACTGAAAGTACTCTACAGCC
AAAAGGCCACTCCTGGCTCCAGCCGGAAGACCTACCATTACATTCCCTCCCTGCCAGACCATAACCTGGATGCCC
CTGAAATCCGAAATGACTACTACCTGAATCTTGTGGACTGGAGCTCTGGGAATGTATTGGCCGTGGCGCTGGACA
ACAGTGTGTACCTGTGGAGCGCAAGCTCTGGTGACATCCTGCAGCTTTTGCAAATGGAGCAGACTGGGAAATATG
TATCCTCTGCGGCCTGGATCAAAGAGGGCAACTACTTGGCTGTGGGCATCAGCAGTGCTGAGGTGCAGCTTTGGG
ATGTGCAGCAGCAGAAACGGCTTCGAAATATGACCATTCACTCTGCCCCAGTGGGCTCCCTAAGCTGGAACAGCT
ATATCCTATCCAGTGGTTTACATTCTGGCCACATCCACCACCATGATGTTTCGGGTAGCAGAACCACAGTGGCCA
CACTGAGTGGCCACAGCCAGGAAGTGTGTGGGCTGCGCTGGGTCCCAGATGGACGACATTTGGCCAGTGGTGGCA
ATGATAACTTGGTCAAAGTGTGGCCTAGTGCTCTTGGAGAGGGTGGCTGGGTTCTCTGCAGACATTACCCCTTC
AAGGGGCTGTCAAGGCCGTAGCATGGTGTCCCTGGAAGTCCAATGTCCCGGCAACAGGAGGGGGCACCAGTGATC
GACACATTTGCATCTGGAACGTGTGCTCTGGGGCCTGTCTGAGTGCCGTGGATGCCCTTTCCCAGGTGTGCTCCA
CCCTCTGGTCTCCCCACTACAAGGAGCTCATCTCAGGCCATGGCTTTGCACAGAACCAGCTGGTTATTTGGAAGT
ACCCAACCATGGCCAAGGTGGCTGAACTCAAAGGTACACATCCCGGGTCCTGACTCTGACCATGAGCCCAGATG
GGGCCACAGTGGCATCTGCAGCAGCAGATGAGACCCCGAGGCTATGGCAGTGTGTTTGGAGTTGGACCTGTGTGGC
GGCGGGAGCGGGAGAAGGCCAGTGCAGCCAAAAGCAGCTTCATCCACCAAGGCATCCGCTGAAGACCAACCCCTC
GCCTCAGTTGTTTTTTATTTTTCTAATAAAGTCATGTCTCCCTTCA

WO 2004/030615

PCT/US2003/028547

2936/6881
FIGURE 2712

CTTTCCCAGCCCCAGCCCGGCCCTTGCAGCTGCAGAGATGTTGATGCCTAAGAAGAACCGGATTGCCATTTATGA
ACTCCTTTTTTAAGGAGGGAGTCATGGTGGCCAAGAAGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAA
GAATGTGCCCAACCTTCATGTCATGAAGGCCATGCAGTTTCTCAAGTCCCGAGGCTATGTGAAGGAACAGTTTGC
CTGGAGACATTTCTACTGGTATCTTACCAATGAGGGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCAGA
GATTGTGCGTGCCACCCTATGCCGTAGCCGTCCAGAGACTGGCAGGCCCTCGGCCTAAAGGTCTGGAGATTGAGCG
ACCTACGAGACTCGCAAGAGGGGAAGCTGACAGAGATACCCACAGATGAGTGTGTGCCACCTGGTGCCGGCAAG
AAAGCTGAGGCTGGGGCTGGGTGAGCAACCGAATTCCAGTTTAGAGGCGGATTTGGTCATGGACGTGGTCAGCCA
CCTCAGTAAAATTGGAGAGGATTCTTTTGCATTGAATAAACTTACAGCCAAAAATCCTTAAAA

WO 2004/030615

PCT/US2003/028547

2937/6881
FIGURE 2713

MLMPKKNRIAIYELLFKEGVMVAKKDVHMPKHPELADKNVPNLHVMKAMQFLKSRGYVKEQFAWRHFYWYLTNEG
IQYLRDYLHLPPEIVPATLCRSRPETGRPRPKGLEIERPTRLARGEADRDTHR

WO 2004/030615

PCT/US2003/028547

2938/6881

FIGURE 2714

AGTCTCCGGCGAGTTGTTGCCTGGGCTGGACGTGGTTTTTGTCTGCTGCGCCCGCTCTTCGCGCTCTCGTTTCATT
TTCTGCAGCGCGCCACGAGGATGGCCCCACAAGCAGATCTACTACTCGGACAAGTACTTCGACGAACACTACGAGT
ACCGGCATGTTATGTTACCCAGAGAACTTTCCAAACAAGTACCTAAAACTCATCTGATGTCTGAAGAGGAGTGGA
GGAGACTTGGTGTCCAACAGAGTCTAGGCTGGGTTCATTACATGATTGATGAGCCAGAACCACATATTCTTCTCT
TTAGACGACCTCTTCCAAAAGATCAACAAAAATGAAGTTTATCTGGGGATCGTCAAATCTTTTTCAAATTTAATG
TATATGTGTATATAAGGTAGTATTCAGTGAATACTTGAGAAATGTACAAATCTTTCATCCATACCTGTGCATGAG
CTGTATTCTTCACAGCAACAGAGCTCAGTTAAATGCAACTGCAAGTAGGTTACTGTAAGATGTTTAAGATAAAAG
TTCTTCCAGTCAGTTTTTCTCTTAAGTGCCGTGTTGAGTTTACTGAAACAGTTTACTTTTGTTCAATAAAGTTTG
TATGTTGCATTTAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2939/6881
FIGURE 2715

MAHKQIYYSDKYFDEHYEYRHVMLPRELSKQVPKTHLMSEEEWRLGVQQSLGWVHYMIHEPEPHILLFRRPLEK
DQQK

WO 2004/030615

PCT/US2003/028547

2940/6881
FIGURE 2716A

CGGGCAGCGTGGACCCCGGATGAGTTGCTTTTAGGCTTGCTGGCCCCGCGGGGCTGTCCAGGCACGCGAGGCCCCCT
CAACAAAATGCTTCAACAAGTTCCAGAAAACATAAATTTTCTGCTGAAGAAGAGAAAATCTTGGAGTTTTGGAC
TGAATTTAATTGTTTTTCAGGAATGCTTAAAGCAATCAAAACATAAACCAAAATTTACCTTCTATGATGGTCTCTCC
TTTTGCAACTGGACTGCCTCACTATGGACATATACTTGCGGGTACAATTAAAGATATAGTTACAAGATATGCTCA
CCAGAGTGGGTTTCATGTTGACAGAAGATTTGGATGGGATTGCCATGGCTTACCTGTGGAATATGAAATTGATAA
GACACTGGGAATCAGAGGACCAGAGGATGTGGCCAAAATGGGGATTACAGAGTATAACAATCAGTGCCGAGCAAT
TGTGATGAGATATTCTGCTGAGTGGGAAGTCTACTGTTAGCAGACTTGGCCGATGGATTGACTTTGACAATGACTA
TAAACTCTGTATCCACAATTCATGGAATCAGTCTGGTGGGTCTTCAAACAACCTCTATGATAAAGGCCCTTGTTTTA
TAGAGGTGTGAAAGTCATGCCCTTCTCTACGGCATGTAACACTCCACTTTCCAACCTTCGAGTCACACCAGAATTA
TAAGGATGTTCAAGATCCTTCAGTATTTGTAACCTTTCCCTTTGGAAGAAGATGAACTGTATCTTTAGTTGCTTG
GACAACCACTCCCTGGACTCTACCTAGTAACCTTGCTGTGTGTGTTAATCCAGAAATGCAATATGTGAAAATTAA
AGATGTTGCCAGAGGACGATTACTCATTTTAATGGAAGCCAGATTGTCAGCCCTCTATAAATTGGAGAGTGACTA
TGAGATCCTTGAAAGATTTCTGGTGCCTATCTTAAAGGCAAGAAGTACAGGCCCTGTTTGACTATTTCTCTGAA
GTGTAAAGAGAATGGCGCTTTCAGTGTGCTTGTGACAACATATGTGAAGGAAGAAGAAGGCACAGGGGTTGTCCA
CCAAGCTCCTTACTTCGGTGTGAGGACTATCGGGTCTGTATGGACTTTAACATTATTTCGGAAGACTCACTCCC
TGTTTTGCCCTGTGGATGCTTCAGGCTGCTTCACAACGGAGGTGACAGATTTTCGACAGGACAGTATGTGAAGGATGC
TGACAAAAGTATCATCAGGACTTTGAAGGAACAAGGCCGACTTCTGGTTGCCACCACCTTCACTCACAGTACCC
TTTTTGCTGGAGATCAGACACTCCTCTAATTTACAAAGCAGTGCCAGCTGGTTTGTGCGAGTGGAGAACATGGT
GGACCAGCTCCTAAGGAACAATGACCTGTGCTACTGGGTCCCAGAGTTGGTACGAGAAAAACGATTTGGAAATTG
GCTGAAAGATGCACGTGACTGGACAATTTCCAGAAACAGATACTGGGGCACCCCCATCCCCTGTGGGTGACGGA
TGACTTTGAGGAGGTGGTATGCATTGGGTGAGTGGCGGAACCTTGAAGAACTGTCAGGAGCAAAGATCTCAGATCT
CCACAGAGAGAGTGTGACCACCTGACCATTCCCTTCACGCTGTGGGAAGGGATCCTTGACCCGATCTCTGAAGT
GTTTGACTGTTGGTTTGAGAGTGGCAGCATGCCCTATGCTCAGGTTTATTACCCGTTTGAAAACAAGAGGGAGTT
TGAGGATGCTTTTCTGAGATTTTATTGCGGAGGGCATCGACCAAACAGAGGATGGTTTTATACCCTGCTGGT
GCTGGCCACGGCCCTCTTTGGACAACCGCCTTTCAAGAACGTAATTGTGAATGGGCTTGTCTGGCAAGTGATGG
CCAAAAAATGAGCAAACGGAAAAAGAATTATCCAGATCCAGTTTCCATCATCCAGAAGTATGGTGCTGATGCCCT
CAGATTATATCTGATTAACTCCCCTGTGGTGAGAGCAGAAAACCTCCGCTTTAAGAAGAGGGTGTGCGGGACGT
CCTTAAGGATGTACTGCTCCCATGGTACAATGCCTATCGCTTCTTAATCCAGAACGTTCTGAGGCTCCAGAAGGA
GGAAGAAATAGAATTTCTCTACAATGAGAACCGGT TAGAGAAAGCCCCAACATTACAGACCGGTGGATCCTGTC
CTTCATGCAGTCTCTCATTGGCTTCTTTGAGACTGAAATGGCAGCTTATAGGCTTTTACTGTGGTGCCTCGCCT
GGTCAAGTTTGTAGATATTCTGACCAATTGGTATGTTAGAATGAACGCGAGAAGATTAAAGGGTGAAAATGGGAT
GGAGGATTGTGTCATGGCCCTAGAAACCTTGTTTAGTGTTCTGCTTTCTCTTTCAGACTTATAGTCCCTACAC
ACCTTTTCTCACTGAATTGATGTACCAGAATCTAAAGGTGCTGATTGACCCTGTTTCTGTTTCAGGACAAGGACAC
ACTCAGCATTCACTACCTCATGCTGCCCCGTGTTTCGAGAAGAATTGATTGACAAGAAAACAGAGAGTGCAGTATC
TCAGATGCAGTCTGTGATTGAACTTGGAAGAGTGATCAGAGACCGAAAAACTATTCCCATAAAGTATCCTTTGAA
AGAAATTGTGGTTATCCATCAAGATCCAGAAGCTCTTAAAGATATCAAGTCTTTGGAGAAGTATATCATTGAGGA
ACTCAATGTTTCGAAAAGTTACTGTCTACAGATAAAAACAAGTATGGCATTTCGGCTAAGGGCAGAACCAGATCA
CATGGTCTTGGGAAGCGTCTGAAGGGAGCCTTTAAGGCAGTGATGACGTCCATCAAGCAGTTGAGCAGTGAGGA
GCTGGAGCAGTTCCAGAAGACTGGGACCATTTGTTGTGGAAGGCCATGAATTGCACGATGAAGACATCCGCCTCAT
GTACACCTTTGATCAGGCCACAGGTGGGACTGCGCAATTTGAAGCACACTCAGATGCTCAGGCTTTGGTCTCTT
AGATGTCACTCCTGACCAGTCAATGGTAGATGAAGGAATGGCTCGGGAAGTCATCAATCGCATACAGAACTTCG
CAAAAAGTGCAATCTGGTTCCAACCTGATGAAATCACAGTGACTATAAAGCAAAGTCTGAAGGAACATATCTGAA
TAGTGTTATTGAAAGCCACACAGAGTTCATATTTACCACCATAAAGGCTCCCTTGAAACCATATCCAGTTTCTCC
ATCGGATAAAGTCCTTATTCAAGAAAAAACACAGTTGAAGGGATCTGAACTGGAAATTACACTCACCAGAGGATC
TTCCCTTCTGCTGCTGCTGTGCAATCTTAACATTTGTGCAATGGCAGTGAACAAGGTGGAGTATT
GCTCCTGGAAAATCCAAAAGGTGACAATAGGTTGGACCTTTTAAAGCTGAAGAGTGTTGTCACTAGCATTTTTGG
TGTGAAAATAACAGAGCTGGCTGTCTCCATGATGAAACAGAAAATACAAAACCAAAGTACTTACTGAGTCTTAG
TGGAAAAACACTTTGTGTGACTGCAGGATCGGCTCCCTCTCTGATCAACAGTTCTAGTACTCTTCTTTGTGAGTA

WO 2004/030615

PCT/US2003/028547

2941/6881
FIGURE 2716B

TATCAACCTACAGCTCCTGAATGCAAAGCCACAAGAGTGTTTAATGGGGACAGTGGGCACTCTCCTGCTTGAAAA
CCCACCTTGGGCAGAATGGACTCACCCACCAAGGTCTTCTGTATGAAGCAGCCAAGGTGTTTGGCCTTCGGAGCAG
GAAGCTAAAGCTGTTTCTGAATGAGACCCAAACGCAGGAAATTACAGAAGACATCCCCGTGAAGACTTTGAATAT
GAAGACTGTGTATGTTTCTGTGTTACCAACAACAGCAGACTTCTAGCATGTACTTATCAATGTTGTTTCGGTCAGC
CCTTCCCTAATTACACCTATCCCCTACACATACATGCACATAGACACACACATGAACACACTGAAGATATTTCTT
TCAGGTGTGTGTAATAATGCTGCTTGGATTGAAATTCAAATGGGATTGATTAGTCAAGTAACTTGAGACCTCAC
AGTAATCTTCACACTTAACCTTAGACACCTATGCAGTCATGTTGGGAGCAGGTTACAATGTTACTTCAGCCCACA
GTTTATTTCTATTCTTGAGTTCCTTAAGTACAGAAGATAGAAGTGATTTAAATGGCATAGTATATATATCATTTTC
TGGCCTTTTAAATTTATTTGAGACCTCTTGATGAAATGGACATATTATATATTTCTGCCACCTGGATTTTCCTG
GATAATTTGATGGAATATTTTAAGTTTCAGTAAATCAGAACAATAAACAACTCAGATAT

WO 2004/030615

PCT/US2003/028547

2942/6881
FIGURE 2717

MLQQVPENINFPAAEEKILEFWTEFNCFQECLKQSKHKPKFTFYDGPPFATGLPHYGHILAGTIKDIVTRYAHQS
GFHVDRRF'GWDCHGLPVEYEIDKTLGIRGPEDVAKMGITEYNNQCRAIVMRYSAEWKSTVSRLGRWIDFDNDYKT
LYPQFMESVWWVFQLYDKGLVYRGVKVMPFSTACNTPLSNFESHQNYKDVQDPSVFVTFPLEEDETIVSLVAWTT
TPWTLPSNLAVCVNPEMQYVKIKDVARGRLILMEARLSALYKLES DY EILERFPGAYLKGKKYRPLFDYFLKCK
ENGAFTVLVDNYVKEEETGVVHQAPYF GAEDYRVCMDFNII RKDSL P VCPVDASGCTTEVTDFAGQYVKDADK
SIIRTLKEQGRLLVATTFTHSYFPCWRS D TPLIYKAVPSWFVRVENMVDQLLRNNDLCYWVPELVREKRFGNWLK
DARDWTISRNRWGTPIPLWVSDDFEEVVCIGSVAELEELSGAKISDLHRESVDHLTIPSRCGKGS LHRISEVFD
CWFESGSMPYAQVHYPFENKREFEDAFPADFIAEGIDQTRGWFY TLLVLATALFGQPPFKNVI VNGLVLASDGQK
MSKRKKNYPD PVSIIQKYGADALRLYLINSPVVR AENLRFKEEGVRDVLKDVLLPWYNAYRFLIQNVLRLQKEE
IEFLYNENTVRESPNITDRWILSFMQSLIGFFETEMAAYRLYT VVPRLVKFVDILT N WYVRMNRRLKGENGMED
CVMALETLSVLLSLCRLIAPYTPFLTEL MYQNLKVLIDPVSVDKDTLSIHYLM LPRVREELIDKKTESAVSQM
QSVIELGRVIRDRKTIPIKYPLKEIVVIHQDPEALKD IKSLEKYII EELNVRKVTLS DKNKYGIRLRAEPDHMV
LGKRLKGAFKAVMTSIKQLSSEELEQFQKTGTIVVEGHELHDEDIRLMYTFDQATGGTAQFEAHSDA QALVLLDV
TPDQSMVDEGMAREVINRIQKLRKKCNLVPTDEITVYYKAKSEGTYLNSVIESHTEFI FTTIKAPLKPYPVSPSD
KVLIQEKTQLKGSELEITLTRGSSLP GPACAYVNLNICANGSEQGGVLLLENPKGDNRLDLLKLKSVVTSIFGVK
NTELAVFHDETEIQNQTDLLSLSGKTL CVTAGSAPSLINSSSTLLCQYINLQLLNAKPQECLMGT VGTLLLENPL
GQNGLTHQGLLYEAAKVFG LRSRKLKFLNETQTQEITEDIPVKTLNMKTVYVSVLP TTADF

WO 2004/030615

PCT/US2003/028547

2943/6881
FIGURE 2718A

CGGGCAGCGTGGACCCCGGATGAGTTGCTTTTAGGCTTGCTGGCCCGGGGCTGTCCAGGCACGCGAGGCCCCCT
CAGGTACGCCCTCTCTTCCCTGCAGGATCCGGCCCTCAAAGACGAGGGTCACGCACGCGTTACAACCCCGAAACA
GTAGCACAAAGATTTAATTTTTTAAAGAGCGTGTTCCTCGGGGCTTGCCGTTTCGTTTCAGCCTCAGGAAT
TTATGGTCGCCTTTTTGAATGAGCAACAAATGCTTCAACAAGTTCAGAAAACATAAATTTTCCTGCTGAAGAA
GAGAAAATCTTGGAGTTTTGGACTGAATTTAATTGTTTTTCAGGAATGCTTAAAGCAATCAAACATAAACCAAAA
TTTACCTTCTATGATGGTCCTCCTTTTGCAACTGGACTGCCTCACTATGGACATACTTGCGGGTACAATTAAA
GATATAGTTACAAGATATGCTCACCAGAGTGGGTTTCATGTTGACAGAAGATTTGGATGGGATTGCCATGGCTTA
CCTGTGGAATATGAAATTGATAAGACACTGGGAATCAGAGGACCAGAGGATGTGGCCAAAATGGGGATTACAGAG
TATAACAATCAGTGCCGAGCAATTGTGATGAGATATTCTGCTGAGTGGAAGTCTACTGTTAGCAGACTTGGCCGA
TGGATTGACTTTGACAATGACTATAAACTCTGTATCCACAATTCATGGAATCAGTCTGGTGGGTCTTCAAACAA
CTCTATGATAAAGGCCTTGTTTATAGAGGTGTGAAAGTCATGCCCTTCTCTACGGCATGTAACACTCCACTTTCC
AACTTCGAGTCACACCAGAATTATAAGGATGTTCAAGATCCTTCAGTATTTGTAACTTTCCCTTTGGAAGAAGAT
GAAACTGTATCTTTAGTTGCTTGGACAACCACTCCCTGGACTCTACCTAGTAACCTTGCTGTGTGTGTTAATCCA
GAAATGCAATATGTGAAAATTAAAGATGTTGCCAGAGGACGATTACTCATTTTAATGGAAGCCAGATTGTCAGCC
CTCTATAAATTGGAGAGTGACTATGAGATCCTTGAAAGATTTCTGGTGCCTATCTTAAAGGCAAGAAGTACAGG
CCCCGTGTTGACTATTTCTGAAGTGTAAGAGAATGGCGCTTTCAGTGTGCTTGTGACAACATATGTGAAGGAA
GAAGAAGGCACAGGGGTTGTCCACCAAGCTCCTTACTTCGGTGCTGAGGACTATCGGGTCTGTATGGACTTTAAC
ATTATTCGGAAGACTCACTCCCTGTTTGCCCTGTGGATGCTTCAGGCTGCTTCACAACGGAGGTGACAGATTTTC
GCAGGACAGTATGTGAAGGATGCTGACAAAAGTATCATCAGGACTTTGAAGGAACAAGGCCGACTTCTGGTTGCC
ACCACCTTCACTCACAGCTACCCTTTTTGTGAGATCAGACACTCCTCTAATTTACAAAGCAGTGCCACAGCTGG
TTTGTGCGAGTGGAGAACATGGTGGACCAGCTCCTAAGGAACAATGACCTGTGCTACTGGGTCCCAGAGTTGGTA
CGAGAAAAACGATTTGGAAATTGGCTGAAAGATGCACGTGACTGGACAATTTCCAGAAACAGATACTGGGGCACC
CCCATCCCCTGTGGGTCAGCGATGACTTTGAGGAGGTGGTATGCATTGGGTGAGTGGCGGAACCTGAAGAACTG
TCAGGAGCAAAGATCTCAGATCTCCACAGAGAGAGTGTGACCACCTGACCATTCTTCACGCTGTGGGAAGGGA
TCCTTGCACCGCATCTCTGAAGTGTTTGACTGTTGGTTTGAGAGTGGCAGCATGCCCTATGCTCAGGTTTCATTAC
CCGTTTGAAAAACAAGAGGGAGTTTGAGGATGCTTTTCTGCAGATTTTCATTGCCGAGGGCATCGACCAACCAGA
GGATGGTTTTTATACCTTGCTGGTGTGCTGGCCACGGCCCTCTTTGGACAACCGCCTTTCAAGAACGTAATTGTGAAT
GGGCTTGTCTGGCAAGTGATGGCCAAAAAATGAGCAAACGGAAAAAGAATTATCCAGATCCAGTTTCCATCATC
CAGAAGTATGGTGTGATGCCCTCAGATTATATCTGATTAACCTCCCTGTGGTGAGAGCAGAAAACCTCCGCTTT
AAAGAAGAGGGTGTGCGGGACGTCCTTAAGGATGTACTGCTCCCATGGTACAATGCCTATCGCTTCTTAATCCAG
AACGTTCTGAGGCTCCAGAAGGAGGAAGAAATAGAATTTCTCTACAATGAGAACACGGTTAGAGAAAGCCCCAAC
ATTACAGACCGGTGGATCCTGTCTTTCATGCAGTCTCTCATTGGCTTCTTTGAGACTGAAATGGCAGCTTATAGG
CTTTATACTGTGGTGCCTCGCCTGGTCAAGTTTGTAGATATTCTGACCAATTGGTATGTTAGAATGAACCGCAGA
AGATTAAAGGGTGAAAATGGGATGGAGGATTGTGTCTATGGCCCTAGAAACCTTGTTTAGTGTTCTGCTTTCTCTT
TGCAGACTTATAGCTCCCTACACACCTTTTCTCACTGAATTGATGTACCAGAATCTAAAGGTGCTGATTGACCCT
GTTTCTGTTGAGGACAAGGACACACTCAGCATTCACTACCTGATTGAACCTTGGAAGAGTGATCAGAGACCGAAAACT
AAGAAAACAGAGAGTGAGTATCTCAGATGCAGTCTGTGATTGAACCTTGGAAGAGTGATCAGAGACCGAAAACT
ATTCCCATAAAGTATCCTTTGAAAGAAATTGTGGTTATCCATCAAGATCCAGAAGCTCTTAAAGATATCAAGTCT
TTGGAGAAGTATATCATTGAGGAACCAATGTTTCGAAAAGTTACACTGTCTACAGATAAAAACAAGTATGGCATT
CGGCTAAGGGCAGAACCAGATCACATGGTCCTGGGGAAGCGTCTGAAGGGAGCCTTTAAGGCAGTGATGACGTCC
ATCAAGCAGTTGAGCAGTGAGGAGCTGGAGCAGTTCCAGAAGACTGGGACCATTGTTGTGGAAGGCCATGAATTG
CACGATGAAGACATCCGCTCATGTACACCTTTGATCAGGCCACAGGTGGGACTGCGCAATTTGAAGCACACTCA
GATGCTCAGGCTTTGGTCCTCTTAGATGTCACTCCTGACCAGTCAATGGTAGATGAAGGAATGGCTCGGGAAGTC
ATCAATCGCATACAGAACTTCGCAAAAAGTGCAATCTGGTTCCAAGTATGAAATCACAGTGTACTATAAAGCA
AAGTCTGAAGGAACATATCTGAATAGTGTTATTGAAAGCCACACAGAGTTTCATATTTACCACCATAAAGGCTCCC
TGAAACCATATCCAGTTTCTCCATCGGATAAAGTCTTATTCAAGAAAAACACAGTTGAAGGGATCTGAAGT
GAAATTACACTCACCAGAGGATCTTCCCTTCCCTGGTCTGCTTGTGTCATATGTCAATCTTAACATTTGTGCAAT
GGCAGTGAACAAGGTGGAGTATTGCTCCTGGAAAATCCAAAAGGTGACAATAGGTTGGACCTTTTAAAGCTGAAG

WO 2004/030615

PCT/US2003/028547

2944/6881
FIGURE 2718B

AGTGTTGTCTACTAGCATTTTTTGGTGTGAAAAATACAGAGCTGGCTGTCTTCCATGATGAAACAGAAATACAAAAC
CAAACCTGACTTACTGAGTCTTAGTGGAAAAACACTTTGTGTGACTGCAGGATCGGCTCCCTCTCTGATCAACAGT
TCTAGTACTCTTCTTTGTCTAGTATATCAACCTACAGCTCCTGAATGCAAAGCCACAAGAGTGTTTAATGGGGACA
GTGGGCACTCTCTGCTTGAAAACCCACTTGGGCAGAATGGACTCACCCACCAAGGTCTTCTGTATGAAGCAGCC
AAGGTGTTTGGCCTTCGGAGCAGGAAGCTAAAGCTGTTTCTGAATGAGACCCAAACGCAGGAAATTACAGAAGAC
ATCCCCGTGAAGACTTTGAATATGAAGACTGTGTATGTTTCTGTGTTACCAACAACAGCAGACTTCTAGCATGTA
CTTATCAATGTTTGTTCGGTCAGCCCTTCCCTAATTACACCTATCCCCTACACATACATGCACATAGACACACACA
TGAACACACTGAAGATATTTCTTCAGGTGTGTGTAAAATATGCTGCTTGGATTGAAATTCAAATGGGATTGATT
AGTCAAGTAACTTGAGACCTCACAGTAATCTTCACACTTAACCTTAGACACCTATGCAGTCATGTTGGGAGCAGG
TTACAATGTTACTTCAGCCCACAGTTTATTTCTATTCTTGAGTTCTTAAGTAÇAGAAGATAGAAGTGATTTAAAT
GGCATAGTATATATATCATTTTTCTGGCCTTTTAAAATTTATTTGAGACCTCTTGATGAAATGGACATATTATATA
TTTCTGCCACCTGGATTTTCTTGATAATTTGATGGAATATTTTAAGTTTCAGTAAATCAGAACAATAAACAAAC
TCAGATAT

WO 2004/030615

PCT/US2003/028547

2945/6881

FIGURE 2719

MLQQVPENINFPAEEEEKILEFWTEFNCFQECLKQSKHKPKFTFYDGPPFATGLPHYGHILAGTIKDIVTRYAHQS
GFHVDRRFGWDCGGLPVEYEIDKTLGIRGPEDVAKMGITEYNNQCRAIVMRYSAEWKSTVSRLGRWIDFDNDYKT
LYPQFMESVWWVFKQLYDKGLVYRGVKVMPFSTACNTPLSNFESHQNYKDQDPSVFVTFPLEEDETIVSLVAWTT
TPWTLPSNLAVCVNPEMQYVKIKDVARGRLILMEARLSALYKLESDEILERFPGAYLKGGKYRPLFDYFLKCK
ENGAFTVLVDNYVKEEEGTGVVHQAPYFGAEDYRVCMDFNIIRKDSLVPVCPVDASGCFTTEVTDFAGQYVKDADK
SIIRTLKEQGRLLVATTFTHSYPFCWRSDTPLIYKAVPSWFVRVENMVDQLLRNNDLCYWVPELVREKRFGNWLK
DARDWTISRNRWGTPIPLWVSDDFEVVCIGSVAEELEELSGAKISDLHRESVDHLTIPSRCGKGS�HRISEVFD
CWFESGSMPIYAQVHYPFENKREFEDAFPAFIAEGIDQTRGWFTLLVLATALFGQPPFKNVIVNGLVLASDGQK
MSKRKKNYPDVPSIIQKYGADALRLYLINSPVVRANLRFKEEGVRDVLKDVLLPWYNAYRFLIQNVLRQLQKEEE
IEFLYNENTVRESPNITDRWILSFMQSLIGFFETEMAAAYRLYTVVPRLVKFVDILTNNWYVRMNRRLKGENGMED
CVMALETFLFSVLLSLCRLIAPYTPFLTELMYQNLKVLIDPVSVDKDTLSIHYLMLPRVREELIDKKTESAVSQM
QSVIELGRVIRDRKTIPIKYPLKEIVVIHQDPEALKDIKSLEKYII EELNVRKVTLSTDKNKYGIRLRAEPDHMV
LGKRLKGAFKAVMTSIKQLSSEEELEQFQKTGTIVVEGHELHDEIRLMYTFDQATGGTAQFEAHSDAQALVLLDV
TPDQSMVDEGMAREVINRIQKLRRKKNLVP TDEITVYKAKSEGTYLNSVIESHTEFIFTTIKAPLKPYVPVSPSD
KVLIQEKTQLKGSELEITLTRGSSLPGPACAYVNLNICANGSEQGGVLLLENPKGDNRLDLLKLKSVVTSIFGVK
NTELAVFHDETEIQNTDLLSLSGKTLCTAGSAPSLINSSSTLLCQYINLQLLNAKPQECLMGTGVTLLLENPL
GQNGLTHQGLLYEAAKVFGLRSRKLLFLNETQTQEITEDIPVKTLNMKTIVYVSVLPETTADF

WO 2004/030615

PCT/US2003/028547

2946/6881
FIGURE 2720A

TGAGGAGGGCCCCGGCCTGCGAGAGCCTCAGTGGGAGCCGGCTCAGCCCTCGGCCACCATGTCGGCGCCGTGCGAG
GAGGAGGAGTACGCGCGGCTGGTGATGGAGGCGCAGCCGGAGTGGCTGCGCGCCGAGGTGAAGCGGCTGTCCAC
GAGCTGGCCGAGACCACGCGTGAGAAGATCCAGGCGGCCGAGTACGGGCTGGCGGTGCTCGAGGAGAAGCACCAG
CTCAAGCTGCAGTTCGAGGAGCTCGAGGTGGACTATGAGGCTATCCGCAGCGAGATGGAGCAGCTCAAGGAGGCC
TTTGACAAGCACACACAAACCACAAGAAGGTGGCTGCTGACGGAGAGAGCCGGGAGGAGAGCCTGATCCAGGAG
TCGGCCTCCAAGGAGCAGTACTACGTGCGGAAGGTGCTAGAGCTGCAGACGGAGCTGAAGCAGTTGCGCAATGTC
CTCACCACACGCGAGTCGGAGAATGAGCGCCTGGCCTCTGTGGCCAGGAGCTGAAGGAGATCAACCAGAATGTG
GAGATCCAGCGTGGCCGCCTGCGGGATGACATCAAGGAGTACAAATTCCGGGAAGCTCGTCTGCTGCAGGACTAC
TCGGAACTGGAGGAGGAGAACATCAGCCTGCAGAAGCAAGTGTCTGTGCTCAGACAGAACCAGGTGGAGTTTGAG
GGCCTCAAGCATGAGATCAAGCGTCTGGAGGAGGAGACCGAGTACCTCAACAGCCAGCTGGAGGATGCCATCCGC
CTCAAGGAGATCTCAGAGCGGCAGCTGGAGGAGGCGCTGGAGACCCTGAAGACGGAGCGCGAACAAGAAGCAGC
CTGCGCAAGGAGCTGTACACTACATGAGCATCAATGACTCCTTCTACACCAGCCACCTGCATGTCTCGCTGGAT
GGCCTCAAGTTTCAGTGACGATGCTGCCGAGCCCAACAACGATGCCGAGGCCCTGGTCAATGGCTTTGAGCACGGC
GGCTGGCCAAGCTGCCACTGGACAACAAGACCTCCACGCCCAAGAAGGAGGGCCTCGCACCGCCCTCCCCAGC
CTCGTCTCCGACCTACTCAGTGAGCTCAACATCTCTGAGATCCAGAAGCTGAAGCAGCAGCTGATGCAGATGGAG
CGGGAAAAGCGGGCCTGCTGGCAACGCTGCAGGACACACAGAAGCAGCTGGAGCACACGCGGGGCTCCCTGTCA
GAACAGCAGGAGAAGGTGACCCGCTCAGAGAGAATCTGAGTGCCCTGCGGCGCCTGCAGGCCAGCAAGGAGCGG
CAGACAGCCCTGGACAACGAGAAGGACCGTGACAGCCATGAGGATGGGGACTACTACGAGGTGGACATCAACGGG
CCTGAGATCTTGGCCTGCAAGTACCATGTGGCTGTGGCTGAGGCTGGCGAGCTCCGCGAGCAGCTCAAGGCACTG
CGCAGCACGCACGAGGCTCGTGAGGCCCAGCACGCCGAGGAGAAGGGCCGCTATGAGGCTGAGGGCCAGGCACTC
ACGGAGAAGGTCTCCCTGCTAGAGAAGGCCAGCCGCCAGGACCGCGAGCTGCTGGCCCCGGCTGGAGAAGGAGCTA
AAGAAGGTGAGCGACGTGCGCGGCGAGACACAGGGCAGCCTGAGTGTGGCCCAGGATGAGCTGGTGACCTTCAGT
GAGGAGCTGGCCAATCTCTACCACCACGTGTGCATGTGCAACAATGAGACACCCAACCGTGTTCATGCTGGACTAC
TACCGCGAGGGCCAGGGCGGGGCCGCGCACCAGTCCCGGGGGCCGACACAGCCCCGAGGCGCGTGGCCGGCGC
TCACCCATCCTCTACCCAAGGGGCTGCTGGCTCCTGAGGCGGGCCGAGCAGATGGTGGGACGGGGACAGCAGC
CCCTCGCCTGGCTCCTCACTGCCATACCCCTGAGTGACCCACGCCGGGAGCCCCATGAACATCTACAACCTGATC
GCTATCATCCGTGACCAGATCAAGCACCTGCAGGCAGCCGTGGACCGCACCACGGAGCTGTACGCCAGCGCATT
GCCTCTCAGGAGCTGGGCCCCGCGGTGGACAAGGACAAGGAAGCGCTTATGGAGGAGATCCTCAAGCTGAAGTCG
CTGCTCAGCACCAAGCGGGAGCAGATCACCACGCTGCGCACTGTGCTCAAGGCCAACAAGCAGACGGCCGAGGTG
GCCCTTGCCAACCTGAAGAGCAAGTATGAGAATGAGAAGGCCATGGTTACCGAGACCATGATGAAGCTGCGCAAT
GAGCTCAAGGCCCTCAAGGAGGACGCGAGCCACCTTCTCCTCGCTGCGTGCTATGTTTGCCACCAGGTGTGACGAG
TACATTACACAGCTGGATGAGATGCAGCGGCAGCTGGCGGCTGCTGAGGACGAGAAGAAGACGCTGAACCTCGCTG
CTGCGCATGGCCATCCAGCAGAAGCTGGCGCTGACCCAGCGGCTGGAGCTGCTCGAGCTGGACCATGAGCAGACC
CGGCGTGGCCGTGCCAAAGCCGCCCGAAGACCAAGCCAGCCACACCGAGCGTAAGTCACACCTGTGCCTGTGCC
AGCGACAGGGCCGAGGGCACCGGGCTGGCCAACCAGGTGTTCTGCAGCGAGAAGCACAGCATTTACTGTGATTAG

GGGCTGTGGGGCGCCGACGCTGCAGCTAACATCTGCTTCACCTCAACTAACCCAGCAGCAGCGGGACGGCGGTG
CTAGGTCAATCTTAACGTGACTAATGCACAGAGGGTAGGAGTCTAGCCGAGGCGCCATGGGGCGTTGCATCAGCA
GGACACTTGTGAGAGCTTTGTGTGCTTCTCACTCCTCAAAGCCCCCTCAGGAGCACCCAGTCTCAGCTGCTCT
CTTAGGTGGGGGTGAGAGGTGGGGATAGAGCTGCACATTCTTGACGAGATGTGTGATGAAAGCATCTTCAAGC
CCTGCGCACCCGCTGGGGAAACCAAGGGAGGAGTCTGGTCTGCTCCCTCAGCACCCAAAAGGGGCAGAACCTG
AGTTGAGACTTGATGTTTCTCGCATGTGTCTAATGTGACACTAGAAAGCAGTTTTAGGAGGTTCAGCCTGCA
GCATAGGTACGACCTCAGAGGATGGCTTTGCACTTGGCATAGTTTCATGGAAAGGAGTACGTTGTAGTTTATGCA
GTATCTGACTGCAATCATATTCAAGAAAGAAGTGCAGAATTTCTTCCCCAAGCCAGAGAAGAGCAGCCCTGAG
CCCCTGTATTCTGCTGGCCAGACACACATGGCACAGACACAGCTGACCATAACCCAGGAATCCAGAGCTCGGTTT
CTCATTTTCTGAGATCAGGATGCTTGTATAGTGGCCTGTGAGGTGACAGATTGGCAGGGCCCAAGGCCCCAGGTTT
TCATTTTTTCATGAGAAAAGCTTTCCAAGTGCCTGGCCAGACCTTGGTCCTTAGTGCAGAGCCCCGTCTTTGTAC
TTGGGGTGACCCAGCAGCCAATTATCCGGCCTTCCATAGGGGGTTTCAAGTCCCAAGACATGGGGCTTTGAAAC
CCTAGCCTGAAGTCTGAGCCACCAAGGGCTTGGCTGGGTGGACACCCACAGGTGTATCCAGAGCCCAGCCCCGT

WO 2004/030615

PCT/US2003/028547

2947/6881
FIGURE 2720B

GCTGGGAAAGCTTTGCATAGGGCCAGGGCCACTTGTGAGGATTCACAGGTAGGAGATGTTTAGGTCTCTTTATTT
AGTGCAATCTGGGGGATGGCAACAGAGAAAAGAGGAAAGGTAGCTGTAGGGTTCTCCCATTTCCAGAGGCTCCATC
CACACCTGCCCTTCCACATTCTGAGCAGAACTTTTCTCAGTACTTTTTTCCCGATCACCCCTGTGGGACCAGCTGG
ACCTGAGGCTGCAGTCTTCTCTCTGAGGCTGCTTGCCTTGTCTCTCATGCGGAAGAGGCATTGAGTTACCTG
GTGAGAGACCGTGTGCCCCCTCCACAGCTCTCTGCCCTGCGCGTTCTTCCCTTTGGTGCCGAGTATGTTTCGG
TCCCCTCCAGACTCCAGGACACGCCCATGTATGTCCCCTGCGTGTTCATCCTGGGCCCAGATCCCCCTGCCCCAG
CAAGACTCGCAGTGGGATGGCTGCTGGCATGCCACCCTGCATGCGCTTTGCCCTCTCCTTGCAAGCCTGGCACA
TAGCTTCTCTCCATACTCCTAAGGGACTTTGCAGACACCCAAGCCACTGGGACCCCTGCTAACACATGCAGGTCT
TCTCTTCTGCCAACTAACGTGCTGCGGCCCTCCCAGCACGTGGAGAGCTTCAATTGTCAGATAAACAGGAAGCGA
CAGATGACCGCTTTCTAACGCTCTCTTTTCTCCCGTTTTCAGCTGTAGAGTAGCTGCCAGGAGGACTTGGCCACC
CGGCCCTGTACACTGCAGCCCCCTTCCCCTTCCCTCTCGTGGCCCAAGGAGGAAGGAAGGGCAACCTAAAAGC
CCACTTAGAACTTTTTGGATATGCCACTGCAATTCTTTCAAAATAGCATTCCCCAGGTTTTTAATGGGAGGAA
AAAAAGCTTTAATGTTGAGCATGCTGCGAGCTGCTGCTGGAAAGGCCCTCTGTATGGGCCGAAGACCCCTTCTCC
CTGGCTGCCAGGCTCGCCAGGAGCCCACTGGAACGCCACCACGGGGCTCCTTGTTACACATGTTCTTTTTTT
ATCCGATCAACCTGTGCACTTTTGATATTTTGATATTATATTGCTTCCTTAATTCTCGCGTAGAGACGGTCTC
AGGTGCCGTGGTCTATGCTCGTGGTCTGTAGCTGTCCGCTCAGCTCCCACCGTGTGTTGCTGGTGTGAGCAGC
AGGCAGAGCTGTGTGCTCCATAGCGTGTAGCTTTAGACTCGGAGATGAGTGTGTTGACCCAGCGAGGAGCTCAGC
TAAGTGTATCCACGCTGTGGTTTACGAGCCTTTAGATCATACGGCATTGTGGTTCATGTTTGAAATTACAGATTT
TAAATGCCATGTTTCAATTAAGAAATCCAGGGTATTGAGATTCTGGGGTTTTTCATATTGTATTATTATTCTTA
GGAATAGTTCAATGTAACAAGAAGAAAACCTTGACCTTTGCTCTGGTTAAAACAGTAATAGGCACCTTGAAAAAAA
AGATAAATTATTGAATGAGTAGTATTACCTACAAATTCAGAATTTTCTGGGTTTTAGGACGTTGTGAAGCATGA
CTGATTAACAGAATTTTATACAAGTGTACCAATAAAATTCCAAATTGGAATTGTTTTGTTACTCTGGTTGTTGTG
CCAAATTGTGGTACACTTAGAAAATTCTACAGTCGTCGATTTTTAGGGTGTCTCTTTCAACACCTTTTTGTTAG
TAATCATTGCCAGTAGTGCCTTCATCAGTTAAGGGAGGTGTCCAGCACAGATCATTTCAAAAGCGAGCAGGGA
AGAGCTAGTGGGCATGCTGAAGGCCAGCGTGGACAGCAGGTGAGGCAGGTGCTCCTCACACCCAGACCTGGGCAT
CTTCATTGAGGGAAAGAAAACAGTCATTGTGCAAAATTCTGTTAGTCAGTGATTCTTTACTTGCAAAATTCAGGGG
CTTAGAAAATGAAAGCAACACAAAACCTTGAGTGTGCTTTGGGAACCAAATGGACCTTCTGGGACAAGCTGAGC
AAGCTGTATGAACGCCACGTTTGTGAAGAGCTGAGGGTATCAGGAGGGCCGACGCTGTGTTGGCATGCGCAGTAG
GGGATGAGGGTTAGCCATAGTATTCTTTGCAATGTGAAAGCGAGACATTATATCTTCTCTGCTTGGTGTAACT
AATCACTGTTAATTTTCAAGAAACAGAACTCATTAAACTCCTTAGCAAACCAGGTCTACATCCTGTTTGTGTTGC
TGAGTGAGGTTAGTGGGAGTGGTCAAATTTGGTACTCTTGAGGAAGAAAACCTGTCCTTCCTTCTCAAAAAAAGG
AAAAATTATAATAATATAAATGACAAAAATAAAGAATTCTGTTTCTGGAATAAGCATTCTTATTCCTAGTTG
TAGGGACTCCTATTTTTTACCTTCCGTTACAGTGTGATTTCATAAGAAATATTGTTACATTGAGATAACTTCATC
TGTATGGGGTATTTATTTGCAATGATGTCTGAGTACTGTATTTTTTCTGTGCATTACCTTAGTGTGAGAAATGTTG
GTCTTTATTTTTAAAGTCATATGCATGTTCTCCTGCCAAGGAACCTTTACACAGACCCAAACAAAAAATAATAAT
CAAATGCCTTCAATTTCTGAGAAAAATGAGGCAGAGCATGGAAAAGGAATAGGAAGGAGAAATTAATTGAGATTTT
CAGGACACAGACATATGATGTGAATGCCTACAAAGCCAGTGCGCATAGGAACAGTGGGCTGGGTAAAGAGTCAC
ATTGGTAGGACCAATAAAGAATAATAAAAAGAC

WO 2004/030615

PCT/US2003/028547

2948/6881
FIGURE 2721

MSAPSEEEYARLVMEAQPEWLRRAEVKRLSHELAEATTREKIQA AEYGLAVLEEKHQLKLQFEELEVDYEAIRSEM
EQLKEAFGQAHTNHKKVAADGESREESLIQESASKEQYYVRKVLELQTELKQLRNVLTINTQSENERLASVAQELK
EINQNVEIQRGRLRDDIKEYKFREARLLQDYSELEENISLQKQVSVLRQNQVEFEGLKHEIKRLEETEYLN SQ
LEDAIRLKEISERQLEEALET LKTEREQKNSLRKELSHYMSINDSFYTSHLHVSLDGLKFSDDAEPNND AEALV
NGFEHGGGLAKLPLDNKTSTPKKEGLAPPSPSLVSDLLSELNISEIQKLKQQLMQMEREKAGLLATLQDTQKQLEH
TRGSLSEQQEKVTRLTENLSALRRLQASKERQTALDNEKDRDSHEDGDYVEVDINGPEILACKYHVAVAEAGELR
EQLKALRSTHEAREAQHAEKG RYEAEGQALTEKVS LLEKASRQDRELLARLEKELKKVSDVAGETQGSLSVAQD
ELVTFSEELANLYHHVCMCNETPNRVMLDYYREGQGGAGRTSPGGRTSPEARGRRSPILLPKGLLAPEAGRADG
GTGDSSPSPGSSLP SPLSDPRREPMNIYNLIAIIRDQIKHLQA AVDRTELSRQRIASQELGPAVDKDKEALMEE
ILKLKSLSTKREQITT LR TVLKANKQTAEVALANLKS KYEN EKAMVTETMMKL RNELKALKEDAATFSSLRAMF
ATRCDEYITQLDEMQRQLAAAEDEKKTLSLLRMAIQQKLALTQRLELLELDHEQTRRGRAKAAPKTKPATPSVS
HTCACASDRAEGTGLANQVFCSEKHSIYCD

WO 2004/030615

PCT/US2003/028547

2949/6881
FIGURE 2722

GCGGCCTGGGCGGCCGCACCATGGACTCGGGAACCGAGGAGTACGAGCTCAACGGCGGCCTGCCTCCGGGCACAC
CCGGCTCCCCGGACGCCTCGCCGGCCCGCTGGGGCTGGAGGCACGGGCCCATCAACGTGAACCATACGCCAGCA
AGAAGAGCGCAGCCGAGAGCATGCTGGACATCGCGCTGCTGATGGCCAACGCGTCCCAGCTGAAGGCCGTCTGG
AACAGGGCCCCAGCTTCGCCTTCTATGTGCCCCCTGGTGGTCCCTCATCTCCATCTCCCTTGTGCTGCAGATCGGCG
TGGGGGTGCTGCTCATCTTCCTTGTCAAGTACGACCTTAACAACCCGGCCAAGCACGCCAAGCTGGACTTCCTCA
ACAACCTGGCCACGGGCCTGGTGTTCATCATCGTGGTAGTCAACATCTTCATCACGGCCTTCGGGGTCCAGAAGC
CCTTGATGGACATGGCACCCAGCAGTAGGACACCCAGGACCCTGGATGTTGCCTGCCCTGCAACTCAGCTGCCC
GACCCAGGAGTCGCCATACCTGTGAGGTGTCCACCTCCCTGCACATGGCACTACCCAGACTGCCAGAGCCCAGG
CTGGCCTCATCTGCACCATGTCCCCGGACCAGCCCTTGCTCTGACTGCGGCCAAGCACACGCAGGAGGCCACTC
TTGTCTCTCAGCAGCTGTTCCCAGGAGGCAGCTCCCTCCTGGCACATGGGGGTGGCCACAATAGCCCAGAGGGT
CAGAACTGGACAGCTGCAGAGACCTGTGCCAGAGAAGGGTCTCGACCCACTCAAGGACACACAGCAGGTCCGTG
GATGGGCTGGATGAGTGACCAGGGCCAGCCTCTGTCTCAGGACATTCCAGAAGGACAAGGAGATGTCTCTCCCTC
TCCCAAAGCACCAGCGTCCCTGCCTCCCGTGGGCCCTGTCCGGGTGCCCCTGGTGACCCAGCCTCTGTCCACTT
CCTAACCCAGGGACCCTGCACAGCCAGAACTGCCTTTGGCCCTACGGATGGCCACTGGCTCTGGTCTTAAGTGCC
TGGGCTTGGTGGCCATCAAGAGGGAGCCAGTCAGGCCTGTGAGGGCCGTAGACCTTGTATATACCCTGCAACCAGC
AGTGACCGGGCAGAGCCCAACCCCTCCACGGGGGTCCCAGCACCCACTTTTCTAATCATGAATGAACAATAAAG
CCCACGCTCTTTGTCAGGC

WO 2004/030615

PCT/US2003/028547

2950/6881

FIGURE 2723

GCTGCAGCCCTCAGAAGTAAGCAAGGTTTCCTGCCGGGAGAAAAGGATTGAAGCATTCCAGCCAAAATGACGGA
CAGAAGCCCCTTCGAAACCGACATGCTCACCCTGACCCGCTACGTTATGGAAAAGGGGCGTCAGGCCAAAGGGAC
TGGGGAGCTCACCCAGCTGCTGAACTCAATGCTGACGGCCATCAAAGCCATCTCCTCGGCTGTGCGCAAGGCCGG
TCTGGCCCACCTGTATGGAATCGCAGGAAGCGTTAACGTGACGGGAGATGAGGTGAAGAACTGGATGTGCTATC
CAATTCCCTGGTGATCAACATGCTCCAATCCTCCTATAGTACCTGCGTCCTGGTCTCAGAAGAGAATAAGGACGC
CATCATCACCGCCAAGGAGAAGCGGGGGAAATACGTGGTCTGCTTTGACCCACTGGATGGATCTTCCAATATTGA
CTGCCTGGCCTCCATCGGAACCATCTTTGCCATCTATAGAAAAGACCTCAGAGGATGAGCCTTCTGAAAAGGATGC
CCTGCAGTGTGGCCGCAATATTGTGGCCGCGAGGTTATGCGCTGTACGGTAGTGCAACCCCTGGTGGCTCTCTCCAC
AGGGCAAGGCGTGGACCTCTTCATGCTTGACCCGGCTCTTGGTGAATTTGTCCTGGTGAAAAAGATGTCAAGAT
TAAGAAGAAAGGAAAGATTTACAGCCTGAATGAGGGCTATGCCAAGTATTTTGATGCGGCCACCACTGAATATGT
GCAGAAAAAGAAATTCCTGAGGATGGCAGTGCTCCCTATGGGGCCAGGTATGTGGGCTCCATGGTGGCTGACGT
GCACCGCACCCCTGGTCTATGGAGGAATCTTCCTGTACCCAGCCAACCAGAAGAGCCCTAAGGGCAAGCTCCGGCT
CCTGTATGAATGCAATCCCGTGGCCTACATCATTGAGCAGGCAGGAGGCTTGGCGACCACGGGGACCCAGCCTGT
ACTGGACGTGAAGCCCGAGGCAATTCACCAGCGAGTCCCCCTCATTCTGGGGTCACCAGAGGATGTGCAGGAATA
TCTCACCTGTGTGCAGAAAATCAGGCAGGCAGCTAGCGAGTTTGACCCACATGCCCTCTTCTGTTTGTTTTGC
ACCTTGCTTAAGGACCCTAAATGAACGATAAACAGAGATGGTAGCTATGAGTATGCAAAAGGTAAATCCACTTAA
TCACATACAGAAGAGCAACAACAACTGCTTACGACAGGTTTGGAAGCCACAGGCGATTCTATGGTCAATGTGAA
GGACTAGAAATAAAAACCCACATGTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2951/6881
FIGURE 2724

MTDRSPFETDMLTLTRYVMEKGRQAKGTGELTQLLNSMLTAIKAISSAVRKAGLAHLYGIAGSVNVTGDEVKKLD
VLSNSLVINMLQSSYSTCVLVSEENKDAIITAKEKRGKYVVCDFPLDGSSNIDCLASIGTIFAIYRKTSEDEPSE
KDALQCGRNIVAAGYALYGSATLVALSTGQGVDLFMLDPALGEFVLVEKDVKIKKKGKIYSLNEGYAKYFDAATT
EYVQKKKFPEDGSAPYGARYVGSMAVHVHRTLVIYGGIFLYPANQKSPKGLRLLYECNPVAYIIEQAGGLATTGT
QPVLDVKPEAIHQRVPLILGSPEDVQEYLTCVQKNQAGS

WO 2004/030615

PCT/US2003/028547

2952/6881
FIGURE 2725A

CCGAATAGTTAGCCAAGACTACCCGCAGCATCAATAGTCGGCTCCCTGGCCCAGGGCCTGGAGAGTAACCTGGCCA
AGTGGGTGCTGGGCTGGTATGGGAGCCCCGGGTCCCTGGAGCACCTTGCTGGCTGTGGCAGTCACCGGAAGCA
GAGGCTGTCCACCTGGAGGCACAGCGGCACTCCTTGGCACTATTTTGGCCACTTCAGGTTTTATAATCTGTTGAA
ACAAAAATTGTGGGGGAACATCTTGAGTAGGTTTAGAGATGGAATGGGAAGCCTGGCAGAAGCGCTGGTCCAGTC
TTCAGGGTCACGGCTGATACAGGAGTTTAAGCGGCCGTGTGACTCCAAAGCCTAGCTTCTGCAAGCAGATGTTTT
CTTCTAGCCATGTGTGAATTGGAGGTTCCCTGGGCTGTCCACGCCTGGTCATCGGCTGGCAGGAGGCTCTCCAGG
CACACGCAGCACACACAGCACATGCACCACACGTAGCACACACACTGCATGCAGCACACACACACCAGAGGACGC
ACCACACAGAGCACGCACAGCACACACCACACAGCGCACGCACCACACAGAGCACACGCGGCACACACAGCACAC
ACAGCGCACGCACCACGCAGAGCACACACGGGCACATGCAGCATAACACCAAACAGCGCACGCACCACACAGAGC
ACACGCGGCACACGCAGCACACACACCACACAGAGCACCTGGAGACCCACAGCACACACACCACGCAGAGTACA
CGCGGCACACACACCACACACAGCGCATGCACAACACAGAGCACACACAGCACATGCACCACACGTAGCGCGCAC
ACTGCATGCAGCACACACACCACACACAGCGCGTGCACCACACAGAGCACCTGCGGCACACACAGCACACACCGC
ACGCACCACACAGAGCACATGTGGCACACACAGTGCACGCACCACACAGCACCCGCGGCGCACACAGCACACGCTG
GCATATGGCCTCCATGACCCTGTGTCTTGAGGGCAGGTCCTACTTTTGTCTTGTGTGTGGAGCGGAATTTCT
CCCCTGGCTTCTATTGGAGTCCTAGATTATTTAAATCACTTCCTCTGTTAATTGTGCTTGAATTAACCTGTTAG
ATTTACTTCCTAGCAGTTAGTTGCTCAGTATGGGTTTCTACACTATTAAGCAACCTAGCGGTAGTACACAAGGT
TTTGTTAGGATAGCTGTGAGATTTTTTTCTCTAACAATCATCATTAATTTCTGTGTCTGCTCCGTTTTTCTTCAG
TGTTTTATATGATATTAATAGGGGATGTCTAATTTTGTATCTTTAAAAAACTTTATCAAATCTGAAGCATTTTT
CGTGTTATAGCTTCTCTATAATTTTTCATGGATATTGAATATTTGGTGTGATATTCTTCACTCAGTTTTGAACA
TTGAGTTTTCTTCTAATGTTTTGTGCTTATGAAAACCATTTCTGTGTAACGTGTTTAAGTAGCTTATTTATCTGA
AAGAACTCTAATAATGAAAAGAAATAAAAAAGTTTTTTCAGAAGCATGATCATATTTCTCCAGAAGAGTCAGGAACC
ATGTGTGCCAGGAAGGGAAACGGGACTGAGCGTCTCGTAGCGAAACGCCGTGCTGCAGACTTGACGCGGCTCCCC
TCCAGGACGGGCTGGCGGCACACAGACTGTGCACCTTACCTCACTGCCGGCTCATAATAGTAATCAGTGTAATG
GTGTTTTCTCTTTCTGTTTTGTTATTTCTGTGGCGTACGTGTTAAAGTGTGTGAAACTACAAGGCCAGCTAGTCCTTT
CATCATTCCCTTTGGTGCAGGTTTTGGAGCAGCACACAGGGCACACCCCTCGCCACTCTTTATGGGGAATTTTT
GCCCAGGCAGGCAAAGGAGTCATCTTGGTCACAAGTCTCCCTTTTCCCCCTCCCCAGCATCTTCGATCCTGTCCC
CACCCCTCCAGATGCATCCAGGGGTTGCAAGCCTGCCCCCAACAGTCCCCGTGAGGAACAGTGCCCGGGATTG
TCCCAGGGCCCCCTTCCAGCAGGGGGACCTCCTGACTTGAGAGTCCCCAAAGCCTTCCCAGGGCAGCTAGAATCTG
CCTGGAGAGAAGGGATCTTGTCCCCAAGGGTTAGAGGCAGTAACTAATAGCAAGGACAGCTGCCTTTAGCAATT
GTGTGTGTGCATGGCCGGTCCCTGCATTTTTCTTCAGTTCCAAAGCTGCCTGGCATTTTTATGGTCATCTCTG
GAGTCCCTTTGATTCAAGAAATTATACCTCTAGGATGCCAACTAAACGAACAACAACAGAACTCCACCTGTTT
GCTAGCATAACAGGCGTGAAGGCGGCAGTGTGCGCGGCGTCTTCCGCGGAAGCCAGTGTGTGCAGACAGCACG
GGGTGGCGCTGCTCTCAGGTGCTCTGGCTGCTTGGGTTCTTGGCATGCTGATTTGTGACTTAAGATTAAATCAC
ATTGCCAGGGATTACCACGCAACCACGACCTTGGCTGCTCCTCCAGAAACCGTGGTTCGCGCTCACTGCAGATTGG
AGAACAGGTGCATCTCGTAGCTCTTCTTTGGAACAAAAGAAGCCACCAGCTGAGGAAGATGCTCACCAGGTCACC
GTCCCTTTATTTATGCCAGCGATGACCTCTCTAACAAGGTGCAGAGCTTAGCTGATTGGTGAACAGTGATTGGT
TTCCGCTTTGTTACAGTGGCTAAGTTCTGCACCTGAAGAGAAGGTGAGATGGGGACAGTTAAGTTGGAGCCGCT
GGGGCAGAGGCCGTTGCTGACGGGCGGCGCTGCTGCACAGTCAGCTTGGGTGCGGAGCGCGATCCTGGAGGAT
GAGAGACCACTTGACCCCAAGGATGCACTGTCTCCTGCTGGGAATGCTAGCCATGTACTGAGTCTTAAGTCTGT
CCACAGAAACATGCACTAATCGGACATCTGTCTGAAAGGTCAAATGTATTGAAAGTTGCAAAAATTCTTCTTACA
AAAACTAAACCAAATGCATCACCTAAGTGTGTGAAATCATGTGGTAGCTCATGGCTGTGAGCGGGGCGGGGC
GGGGCTTTCGGAGGAGCTCCTGTTGTTCTGGGCGCGGTGAACCTCTCTCTTGTATTGTCAGTCCAGGCCTTCGCGT
CTCCTGCGCCAGCAGACGGTGCCACGGAGCTCCAGCTGAGGCGCTGCTTCTCCGGGCTGTGATTGGACCCGC
CCTCCGGTGCTACTGAGCTGATATCAGTTCTCATTTTTACACACTGGCTCAGTTTACGAGGAACAGGAGTCGAGC
CCTTGAGCAAAAAGCCTTCTGTCTGTGTAAGTGCCCGAGGCTCAGGAGAGCTGGGGCTCCCACTCGCGGCAGACAG
GCGCGCTCCACCTGCGTCCACCCCGGCGCGGCGGCAGCACGGTGCCAGTCATCTGCATGTGCTCCTGCGGCGT
GGGGGTTGTAGACTTGGAACCCCTGTTGGCAGAAAGTTAAGAGCTCCAGGCCTGAAGGCAGGACACAGTGCC
AGCAGGGGGCGGTTTGCCCCCATGTGTAAGGGAGGCAGGGCCCAGCTCTCCACGCGAGGTGAGCTGAGACTTT

WO 2004/030615

PCT/US2003/028547

2953/6881
FIGURE 2725B

CTGAGAACAGTTAGAGTGGGTGCGTGTCTGAAATGGGTACTCCTAGCAGCTATTGTGTACGCAAAGCCTGAGTAC
AGCCTGCTGGTGTGTCATGGCCACGTGTGAGCAGGCCAGCGTCACACGGCTCGCTGTGACCCGTCCCGGAGACTGAA
ATGGGCCTGGGTCTTCTCCTTGTCTGTGATTAAAGTCCTCTCTTGAAAGTGGAGAGCAAAGGCACACAGAGGTG
CGCGCTCACAAGAATTCTCCCGGTGACTGGGTAATCAATGTTACTGCTGTTTCCTTTGCAGGAAAGACCACAGC
AAGATTCTTTCATTTCGTCTCCTCCTAGCCTGGGGGACCAGGCTCGAACTGACCCTGGACATCAAAGGAGGGATTA
TGTGGCTGCTAAAGCCATCGGCCCCACAGCCCTGTTACATCTTGGTGCTTCTCTTTCCCAGAGGCTGGTCCCAGC
CAGGCACACACAAAAGGCAGATTCTCGTAAACGCAGCCTCCCTCCCTGGAGGCTGCCTCCTGCCCTGGATCTGGA
GTGGAGCTGCTCTGAGATTTTGAGTTCTTCTGCAGAGATGATTAAATATATCCAAGAGACATTGGAAAACCTGCT
GAACATTTTACATTGGTCTGCTCAGCACATGGCTGGATGCGGATATTTCTATAATTCCAGAAAGTCACACAGCTC
CTCTGTATGAGACCAGTGGGCGCCATTTAAAAGAACAGGATGAGAATCTAAGATATATTATTAATAAATGTAATG
GATTTTTTTTTTGT

WO 2004/030615

PCT/US2003/028547

2954/6881
FIGURE 2726

GGCGGCCTCAGCAAAAAAGAAGAAGAAGGGGAAGACTATCTCCCTAACAGACTTTCTGGCTGAGGATGGGGG
TACTGGTGGAGGAAGGACCTATGTTTCCAAACCAGTCAGCTGAGCTGATGAAACGGATGACCTGGAAGGAGATGT
TTCGACAACCTTGGCACAGTAACGATGACGATGTGTATAGGGCGTCTCCAATTGACCGTTCCATCCTTCCCCTGCTG
TCCACGGGCTGCTCGGGAACCCAATATCGACCGGAGCCATCTTCCCAAATCGCCACCCTACACTGCTTTTCTAGG
AAACCTACCCTATGATGTTACAGAAGAGTCAATTAAGGAATTCTTTCGAGGATTAAATATCAGTGCAGTGCCTTT
ACCATGTGAACCCAGCAATCCAGTGAGGTTGAAAGGTTTTGGTTATGCTGAATTTGAGGACCTGGATTCCCTGCT
TAGTGCCCTGAGTCTCAAGGAAGAGTCTCTAGGTAACAGGAGAATTCGAGTGGACGTTGCTGATCAAGCACAGGA
TAAAGACAGGGATGATTGTTCTTTTGGCCGTGATAGAAATCGGGATTCTGACAAAACAGGTACAGACTGGAGGGC
TCGTCCTGCTACAGACAGCTTTGATGACTACCCACCTAGAAGAGGTGATGATAGCTTTGGAGACAAGTATCGAGA
TCGTTATGATTACAGACCGGTATCGGGATGGGTATCGGGATGGGTATCGGGATGGCCAACGCCGGGATATGGATCC
ATATGGTGGCCGGGATCGCTATGATGACCGAGGCAGCAGAGACTATGATAGAGGCTATGATTCCCGGATAGGCAG
TGGCAGAAGAGCATTGTCAGTGGGTATCGCAGGGATGATGTCTCAGAGGAGGCGGGGACCACTATGAAGACCGA
TATGACAGACGGGATGATCGGTCTTGGAGCTCCAGAGATGATTACTCTCTGGATGATTATAGGCGTGATGGTAGA
GGTCCCCCCCCAAGACCCAACTGAATCTAAACCCTCGGAGTACTCCTAAGGAAGATGATTCTCTGCTAGTACC
TCCAGTCCACTCGAGCTGCTTCTATCTTTGGAGGGGCAAAGCCCGTTGACACAGCTGCTAGAGAAAGAGAAGTA
GAAGAACGGCTACAGAAGGAACAAGAGAAGTTGCAGCATCAGCTGGATGAGCCAAAAGTAAACGACGGCCTCCG
GAGAGACACCCAAGCTGGCGAAGTGAAGAACTCAGGAACGGGAACGGTCGAGGACAGGAAGTGAGTCATCACAG
ACTGGGACCTCCACCACATCTGGCAGAAGTAAGTCAGCCCAGGATGCACGAAGGAGAGAGAATGAGAAGTCTCTA
GAAAATGAAACACTCAATAAGGAGGAAGATTGCCACTCTCCAATTCTAAACCTCCCAAACCTGATCAGCCCCTA
AAGGTAATGCCAGCCCCCTCCACCAAAGGAGAATGCTTGGGTGAAGCGAAGTTCTAACCCTCCTGCTCGATCTCAG
AGCTCAGACACAGAGCAGCAATCCCCTACAAGTGGTGAGGGAAAAGTAGCTCCAGCTCAACCATCTGAGGAAGGA
CCAGCAAGGAAAGATGAAAACAAAGTAGATGGGATGAATGTCCCAAAGGCCAAACTGGGAACCTTAGCCGTGGT
CCAGGAGATGGAGGGAACAAAGACCACTGGAAGGAGTCAGATAGGAAAGATGGCAAAAAGGATCAAGACTCCAGA
TCTGCACCTGAGCCAAAGAAACCTGAGGAAAATCCAGCTTCCAAGTTCAGTTCTGCAAGCAAGTATGCTGCTCTC
TCTGTTGATGGTGAAGATGAAAATGAGGGAGAAGATTATGCCGAATAG

WO 2004/030615

PCT/US2003/028547

2955/6881
FIGURE 2727

CCTTTGGGAAGCTGCCCCGCGAGTCTCCGAGATTTGTCCCTGGTGGTCCCGCGGACCCCTCGTCCCTCCGCAGTC
TCCGGCTGGCAGCGATGGAGGGCGCTGGGGAGAACGCCCCGGAGTCCAGCTCCTCTGCCCCCTGGGTCCGAAGAGT
CTGCCAGGGATCCACAGGTGCCGCTCCGGAGGAAGAATCGGGGACTGCGCCCGGTCCCTGGAGGCGGTCCCCA
AGAAACTCTGTGGGTATTTAAGTAAGTTTCGGCGGCAAAGGGCCCATCCGGGGCTGGAAATCCCCTGGTCTCTCT
ACGACGAAAGGAAATGTCAGCTGTATTACTCGCGGACCGCTCAGGATGCCAATCCCTTGACAGCATCGACCTCT
CCAGTGCAGTGTTTACTGTAAGGCGGACGCTGAGGAGGGGATCTTCGAAATCAAGACTCCCAGCCGGGTATTA
CCCTGAAGGCCGCCACCAAGCAAGCGATGCTGTACTGGCTGCAGCAGCTGCAGATGAAGCGCTGGGAATTCACA
ACAGCCCCCGGCACCTCTGCCACCCCTGATGCCGCTTGGCTGGGAATGGGCGCTCCTGCACCTCGAGCTAG
GGCAAGAAGAGGCAGAGCTGGAGGAGTTCTGTGCCCTGTGAAAACACCCCTGGGCTAGTGGGCGTGGCAGCTG
CCTTGACGCCCTTCCCTGCCCTTCAGAATATTTCCCTCAAGCACCTGGGGACTGAAATACAGAACACAATGCACA
ACATCCGTGGCAACAAGCAGGCCCCAGGGAACAGGCCATGAACCTCCAGGGGAAGATTCTCCACAGAGTGGGGAGC
CTCAGAGGGAGGAGCAGCCCTTGGCCTCTGACGCCAGCACCCAGGGAGAGAGCCAGAGGATTCTCCAAAGCCTG
CACCCAAGCCTTCTCTGACCATCAGTTTCGCTCAGAAAGCCAAGCGCCAGAACAACACCTTCCCATTTCTTTCTG
AAGGAATCACACGGAACCGAACTGCCAGGAGAAAGTGGCAGCCTTGGAGCAACAGGTTCTGATGCTCACCAAGG
AGTTAAAGTCTCAGAAGGAGCTAGTGAAGATCCTGCACAAGGCACCTGGAGGCCGCCAGCAGGAGAAGCGGGCGT
CCAGCGCATACCTGGCGCGGCTGAGGACAAGGACCGGCTGGAGCTGGTGCGGCACAAAGTGCGGCAGATCGCGG
AGCTGGGCGCGGGTGGAGGCCCTGGAGCAGGAGCGGGAGAGCCTGGCGCACACAGCGAGCCTGCGGGAGCAGC
AGGTGCAGGAGCTACAGCAGCACGTGCAGCTGCTTATGGACAAGAACCACGCCAAGCAGCAGGTCTCTGCAAGC
TCTCTGAGAAGGTCAACCAGGACTTCACGCACCCCCCTGACCAGTCTCCTTTGCGCCCCGACGCTGCCAACAGGG
ACTTCTGAGCCAGCAGGGGAAGATAGAGCACCTGAAGGATGACATGGAAGCTTACCGGACCCAGAAGTGTCTCC
TCAACTCCGAGATCCACCAGGTACAAAGATCTGGAGAAAGGTGGCTGAGAAGGAGAAGGCCCTTCTGACGAAGG
TGCGCTTACCTCCAAGCCAGAACTGCCAGGTGGAAAGCAAGTACCTGGCCGGTCTGAGAAGGCTGCAGGAGGCC
CTGGGGGACGAAGCCAGCGAGTGCTCAGAGCTGCTGAGGCAGCTTGTCCAGGAGGCACTGCAGTGGGAAGCTGGG
GAGGCCTCATCTGACAGCATCGAGCTGAGCCCCATCAGTAAGTATGATGAGTACGGCTTCTGACGGTGCCCGAC
TATGAGGTGGAAGACCTGAAGCTGCTGGCCAAGATCCAGGCATTGGAGTCACGATCCCACCACCTGCTGGGCCCTC
GAGGCTGTGGATCGGCCGCTGAGGGAGCGCTGGGCTGCCCTGGGCGATCTTGTGCCCTCAGCCGAGCTCAAGCAG
CTACTGCGGGCAGGAGTACCCCGTGAACACCGGCCCTCGTGTCTGGAGGTGGCTGGTCCACCTCCGTGTCCAGCAC
CTGCACACTCCAGGCTGCTACCAAGAACTGCTGAGCCGGGGCCAGGCCCGCGAGCACCTGCTGCCCGCCAGATT
GAGCTGGACCTGAACCGGACCTTCCCCAACAAACAACTTCACTGCCCCACCTCCAGCTTCCCCGACAAGCTC
CGCCGGGTGCTGCTGGCCTTCTCCTGGCAGAACCCACCATCGGCTACTGCCAGGGCCTGAACAGGCTGGCGGCC
ATTGCCCTGCTGGTCTTAGAGGAGGAGGAGAGCGCCTTCTGGTGCCTGGTGGCCATTGTGGAGACCATCATGCCC
GCTGATTACTACTGCAACACGCTGACGGCATCCAGGTGGACCAGCGGGTGTCTCCAGGACCTGCTCTCGGAGAAG
CTGCCAGGCTGATGGCCCATCTGGGGCAGCACCGTGGATCTCTCCCTCGTCACCTTCAACTGGTTCTCTCGTG
GTCTTTGCGGACAGTCTCATTAGCAACATCCTCCTTCGGGTCTGGGATGCCTTCTGTACGAGGGGACGAAGTAC
AACGAGAAGGAGATCTTGAGGCTACAGAAATGGCCTGGAATCTACCACTACCTGCGCTTCTTACCAAGACCATC
TCCAACAGCCGGAAGCTGATGAACATCGCCTTCAATGACATGAACCCCTTCCGCATGAAACAGCTGCGGCAGCTG
CGCATGGTCCACCGGAGCGGCTGGAGGCTGAGCTGCGGGAGCTGGAGCAGCTTAAGGCAGAGTACCTGGAGAGG
CGGGCATCCCCGGCGCAGAGCTGTGTCCGAGGGCTGTGCCAGCGAGGACGAGGTGGAGGGGGAAGCCTGACTTGGC
CACCTCCCCCTCCCCACAGCCTTCCCTACCCCTTGGCTGGCAGACCCACTGGAGGTGAGGCAGGACCGAGTGGCCCA
GCCCTGGGTGTCCCATCACCATGTGACCTTGGACATGTCCCTTCCCCTCTCTGGCCCTCAGTTTCCCCACTGGGA
CATTGTGTGCTGCAAGCCATTGGTTGGGCTACTTCTTCATAGGCACTTACTTACCCAGGGATGCCACCCCTTTCG
TCACCTCTTCCACAGAGCACTTTGGCATGTAAACAAGCAAGAGCACTGCCTCTATAGGGTAACCTGGAACATTCT
CTAGGTTATATCAATATAAAACAATGTAATGGTGG

WO 2004/030615

PCT/US2003/028547

2956/6881
FIGURE 2728

CACAGGGGCACTGACATCTTTGCTGGACTCTTTTAATCCTCATAAACCCAGGCTGCTGGCACTTGAAATTTGAGA
AGGGCAATCAGTCTGGCCTCCTGCCTTTCTGGCCTGCAGGCCAGCCTGGACAAACAATTTAGGTGGAGCTCCTG
GAGGCTGGAAGCAGAGAGGAGGTACCTCACCATCCTCTCCTGCCAGCTGTTGCAGACTCTGCCTGGGGAAGTAT
TAAGGGTGAGCAGAGGCATTTATCTCCATGTTAACAAGCAGATGTCATGGCACCCCCAGTACCGGAGCTCCAAGT
TCCGTCATGTCTTTGGCAAACCAGCCAGCAAGGAGAAGTGTACGACTCCGTGCCTATCACCCGCAGCGTTCACG
ACAACCACTTCTGTGCCGTGAACCCCCACTTCATTGCAGTTGTGACTGAGTGTGCTGGTGGAGGGGCTTCCTCG
TCATCCCCCTGCACCAGACAGGGAAGTTGGACCCCCACTACCCAAAAGTCTGCGGGCACAGAGGCAACGTTTGG
ATGTCAAGTGGAAACCTTTTGATGATTTTGAGATCGCCTCCTGTTCTGAAGATGCCACAATTAAGATCTGGAGCA
TCCCCAAGCAGCTGCTGACCAGGAACCTCACGGCCTACAGGAAGGAAGTCTGTTGGGCCACGCGCGCAGAGTAGGCC
TGGTGGAGTGGCACCCCCACGGCCGCCAACATCCTCTTCAGTGTGGCTATGACTACAAGGTGATGATCTGGAACC
TGGATACAAAGGAGTCTGTATCACAAGCCCCATGAGTACGATTAGCTGTACCAAGATGTGATCCTCTCCATGT
CCTTCAACACCAACGGCAGCCTGTTGGCCACCACCTGCAAAGACCGCAAGATTCGGGTTATTGACCCCCGAGCAG
GGACCGTCTCCAGGAGGCCAGCTACAAAGGGCACCAGGGCCAGCAAAGTGTGTTTCTGGGGAACTGAAGAAGC
TGATGTCCACAGGCACATCCCAGTGAACAACCGGCAGGTGGCCTTGTGGGACCAGGATAACCTCTCTGTGCCCTC
TGATGGAGGAGGACCTGGACGGCTCCTCGGGCGTGCTGTTTCCCTTCTATGACGCGGACACCAGCATGCTCTACG
TGGTGGGGAAGGGAGATGGCAACATCCGCTACTACGAGGTGAGCGCCGACAAGCCTCACCTGAGCTACCTGACTG
AGTACCGCTCCTATAACCCACAGAAGGGGATCGGTGTATGCCAAAGAGAGGACTCGACGTGTCTCTCTGCGAGA
TCTTCCGCTTCTACAAGCTGATCACAACCAAAAGCCTCATCGAGCCCATCTCCATGATTGTGCCCCGGCAGTCAG
AATCCTACCAAGAGGACATATACCCTCCAACAGCAGGGGGCCAGCCCTCCCTGACGGGCCAGGAGTGGCTCAGCG
GGATGAATCGAGACCCAATCCTGGTGTCCCTTAGGCCTGGCTCTGAGCTGCTGAGACCCACCCACTGCCTGCAG
AGAGACCTATCTTCAATTCCATGGCCCCAGCCTCACCCCGGCTCTTGAATCAGACAGAAAAGCTGGCTGCAGAAG
ATGGCTGGAGGTCTTCTCCTCCTGTTGGAGGAGAAGATGCCAAGGTGGGCAGCAGAACACAGGCTGGAGGAGAAGA
AAACCTGGCTGACAAATGGCCTTTGACGTTTTTCGAATGCCCCCACCAGAGAGATGAGTTGCTGCAGATGT
TCTACCGGCAACAGGAGGAGATCCGAAGGCTCCGGGAGCTGTTGACCCAGCGAGAGGTCCAGGCCAAACAGTTGG
AACTGGAGATCAAAAACCTTGCGGATGGGCTCAGAGCAGCTCTGAGCAGAGACCTCTGCCCTCCTCACCCCTCAGGG
ACACCACTCGGCTCCATGGGGAGGTTTAGAACCAAAACCACAAGTCCCCTCAAGGACAACCACTATTTCTATATTT
TTTACCAGAAAACAAAACCTCTCCATCGCTGAAAGAGATTCCAGTGGGACATGGTGCCGTTTTTCTGTTTGCCTTC
TTGCAACAACAGTTTCTGAATTGACTTTGTTTTTCAGATGATGCCTTCTGTTGAATTCTGTTATTAAGGGCCCATG
ATGAGCTGTAACTTCTCAAGAGGAAAGAACACAGTAGAAAACCTAGAGCTGGAAGGATCTAGGTTGACCTGTCTGT
GATTTTCAAACCTGTGGTCCAGAGAATAGGGGAAGACTGGGCCAGACGCAGTGGCTCATGCCTGTAATCCCAGCAC
TCTGGGAGGCTGAGGTGGGCGGATTGCTTGAGGTGCGGAGTTTGAACCAGTCTCACCAGGCGCAGTGGCTCAG
CCTGTAATTCCAGCATGTTGGGAGGCCGAGGCTGGTGGATCACGAGGTGAGCAGTTGAGACCGCCTGACCAAC
ATGGTGAAACCCCATCTCTACTAAAAA

WO 2004/030615

PCT/US2003/028547

2957/6881
FIGURE 2729

MSWHPQYRSSKFRHVFGKPASKENCYDSVPITRSVHDNHFCAVNPHFIAVVTECAGGGAFLLVIPLHQTKGLDPHY
PKVCGHRGNVLDVKWNPFDDEIASCSEDATIKIWSIPKQLLTRNLTAIRKELVGHARRVGLVEWHPTAANILFS
AGYDYKVMIWNLDTKESVITSPMSTISCHQDVILSMSFNTNGSLLATTCKDRKIRVIDPRAGTVLQEASYKGHRA
SKVLFLGNLKKLMSTGTSRWNNRQVALWDQDNLSVPLMEEDLDGSSGVLFFFYDADTSMLYVVGKGDGNIRYYEV
SADKPHLSYLTEYRSYNPQKGIGVMPKRGLDVSSCEIFRFYKLITTKSLIEPISMIVPRQSESYQEDIYPPTAGA
QPSLTAQEWLSGMNRDPILVSLRPGSELLRPHPLPAERP IFNSMAPASPRLLNQTEKLAEDGWRSSSLLEEKMP
RWAAEHRLEEKKTWLTNGFDVFECPPPKTENELLQMFYRQQEIRRLRELLTQREVQAKQLELEIKNLRMGSEQL

WO 2004/030615

PCT/US2003/028547

2958/6881
FIGURE 2730

GTGGAGATGA**ATG**GCGGGCGCGGGCGACCGGGAGCCGGACCCCTGGGAGGTCGGAGCTTGTGAGGGATGCGGCTG
GCGCTGCCCCGAGCATGGCGACC GCGTGGCTGAGCTCTTCTGTGCGCCGCTGCCGCCGCTGCGTGTGCGCGCTTTG
CCCCGTGCTGGGCGCGCACCGTGGCCACCCTGTGGGCCTGGCGCTGGAGGCAGCGGTGCACGTGCAGAAACTCAG
CCAAGAATGTTTAAAGCAGCTGGCAATCAAGAAGCAGCAGCACATTGACAACATAACCCAGATAGAAGATGCCAC
CGAGAAGCTCAAGGCTAATGCAGAGTCAAGTAAAACCTGGCTGAAGGGGAAATTCACTGAACTCAGATTACTACT
TGACGAAGAGGAAGCGCTGGCCAAGAAATTCATTGATAAAAACACGCAGCTTACCCTCCAGGTGTACAGGGAACA
AGCTGACTCTTGACAGAGAGCAACTTGACATCATGAATGATCTCTCCAACAGGGTCTGGAGTATCAGCCAGGAGCC
CGATCCTGTCCAGAGGCTTCAGGCATACACGGCCACCAGCAGGAGATGCAGCAGCAGATGAGCCTCGGGGAGCT
GTGCCATCCCGTGCCCTCTCTTTTGGAGCCGCTCAAGAGCTTCTTTAAGGGCCTCGTGGAAGCCGTGGAGAGTAC
ATTACAGACGCCATTGGACATTGCCTTAAGGAAAGCATAAACTGCCAGCTCTCAGACCCTTCCAGCACCAAGCC
AGGTACCTTGTTGAAAACAGCCCTCACCAGAGCGATCGCTATTGCTGAAATACGCGCGCACGCCACGCTGGA
TCCTGACACGATGCACGCGCGCTGCGCTGTCCGCCGATCGCCTGACGGTGCCTGCGGCTGCTGGGCAGCCT
GGGGCCCGTGCCCGTGCTGCGGTTGACGCGCTCTGGCAAGTGCTGGCTCGTGACTGCTTCGCCACCGGCCGCCA
CTACTGGGAGGTTGACGTGCAGGAGGCGGGCGCCGGCTGGTGGGTGGGCGCGGCCTACGCCTCCCTTCGGCGCCG
CGGGGCCCTCGGCCGCCGCCCGCTGGGCTGCAACCGCCAGTCCTGGTGCCTCAAGCGCTACGACCTTGAGTACTG
GGCCTTCCACGACGGCCAGCGCAGCCGCTGCGGCCCCGCGACGACCTCGACCGGCTCGGCGTCTTCCCTGGACTA
CGAGGCCGGCGTCCTCGCCTTCTACGACGTGACGGCGGCATGAGCCACCTGCATACCTTCCGCGCCACGTTCCA
GGAGCCGCTCTACCCGGCCCTGCGGCTCTGGGAGGGGGCCATCAGCATCCCCCGGCTGCCCT**AG**GGGCCAGGACC
GGCGTGACAGCCTCCAGACTTGAATCTGTAGACATTTCTTTATTGATATGGCAAATTGCTTGCAGATATTTTAA
ATGACAGCAATTTTCTAATATTTGGTTTAAATAAAATGTGAATAATGTCCTTTT

WO 2004/030615

PCT/US2003/028547

2959/6881

FIGURE 2731

MAGAATGSRTTPGRSELVEGCGWRCPEHGDRVAELFCRRRCRCVCALCPVLGAHRGHPVGLALEAAVHVQKLSQEC
LKQLAIKKQQHIDNITQIEDATEKLNANAESSKTWLKGKFTELRLLLDDEEEALAKKFIDKNTQLTLQVYREQADS
CREQLDIMNDLSNRVWSISQEPDPVQRLQAYTATEQEMQQQMSLGELCHPVPLSFEPVKSFFKGLVEAVESTLQT
PLDIRLKESINCQLSDPSSTKPGTLLKTSPSPERSLLLKYARTPTLDPDTMHARLRLSADRLTVRCGLLGSLGPV
PVLRFDALWQVLARDCFATGRHYWEVDVQEAGAGWWVGAAYASLRRRGASAAARLGCNRQSWCLKRYDLEYWAFH
DGQRSRLRPRDDLDRLGVFLDYEAGVLAFYDVTGGMSHLHTFRATFQEPLYPALRLWEGAISIPRLP

WO 2004/030615

PCT/US2003/028547

2960/6881

FIGURE 2732

GTCGACGCGGCCGCGCTCCGCTCCCGTGAGTAACTTGGCTCCGGGGGCTCCGCTCGCCTGCCCGCACGCCGCCCG
CCACCCAGGACCGCGCCGCCGGCCTCCGCCGCTAGCAAACCTTCCGACGGCCCTCGCTGCGCAAGCCGGGACGC
CTCTCCCCCTCCGCCCGCCGCGGAAAGTTAAGTTTGAAGAGGGGGGAAGAGGGGAACATGACATGAAGAGG
AGGATCCACCTGGAGCTGAGGAACCGGACCCCGCAGCTGTTGAGAACTTGTCTTGGACAATTGCAAATCAAAT
GATGGAAAAATTGAGGGCTTAACAGCTGAATTTGTGAACTTAGAGTTCCTCAGTTTAATAAATGTAGGCTTGATC
TCAGTTTCAAATCTCCCCAAGCTGCCTAAATTGAAAAAGCTTGAACTCAGTGAAAAATAGAATCTTTGGAGGTCTG
GACATGTTAGCTGAAAAACTTCCAAATCTCACACATCTAACTTAAGTGGAATAAACTGAAAGATATCAGCACC
TTGGAACCTTTGAAAAAGTTAGAATGTCTGAAAAAGCCTGGACCTCTTTAACTGTGAGGTTACCAACCTGAATGAC
TACCGAGAGAGTGTCTTCAAGCTCCTGCCCCAGCTTACCTACTTGGATGGCTATGACCGAGAGGACCAGGAAGCA
CCTGACTCAGATGCCGAGGTGGATGGTGTGGATGAAGAGGAGGAGGACGAAGAAGGAGAAGATGAGGAAGACGAG
GACGATGAGGATGGTGAAGAAGAGGAGTTTGATGAAGAAGATGATGAAGATGAAGATGTAGAAGGGGATGAGGAC
GACGATGAAGTCAGTGAGGAGGAAGAAGAATTGGACTTGATGAAGAAGATGAAGATGAGGATGAGGATGAAGAG
GAGGAAGAAGGTGGGAAAGGTGAAAAGAGGAAGAGAGAAACAGATGATGAAGGAGAAGATGATTAAGACCCCGAGA
TGACCTGCAGAAACAGAACTGTTTCAGTATTGGTTGGACTGCTCATGGATTTTGTAGCTGTTTAAAAAAAAAAAAA
AGGTAGCTGTGATACAAACCCAGGACACCCACCCACCCAAAGAGCCAAAGAATAGTTCCTGTGACATTCCGCCT
TCCTTCCATGTAGTCCCTCTTGTAATCTACCACCAAGCTTGTGGACTTCACCCCAACAAAATTGTAAGCGTTGT
TAGGTTTTTGTGTAAGATTCTTGCTGTAGCGTGGATAGCTGTGATTGGTGAGTCAACCGTCTGTGGCTACCAGTT
ACACTGAGATTGTAACAGCATTTTTACTTTCTGTACAACAAAAAGCTTTGTAAATAAAATCTTAACATTTTGGG
TCTGTTTTTTCATGCTTTGCTTTTTAATTATTATTATTATTTTTTTTACATTAGGACATTTTATGTGACAACTGC
CAAAAAAGTATTTTTAAGAATTTAAGCGAAATAAACAGTTACTCTTTGGC

WO 2004/030615

PCT/US2003/028547

2961/6881
FIGURE 2733

MDMKRRIHLELRNRTPAAVRELVLDNCKSNDGKIEGLTAEFVNLEFLSLINVGLISVSNLPKLPKPKKKLELSENR
IFGGLDMLAEKLPNLTHLNLSGNKLDISTLEPLKKLECLKSLDLFNCEVTNLNDYRESVFKLLPQLTYLDGYDR
EDQEAPDSDAEVDGVDEEEDEEGEDEDEDEDGEDEEEFDEEDDEDEDVEGDEDDDEVSEEEEFGLDEEDEDE
DEDEEEEGGKGEKRKRETDDEGEDD

WO 2004/030615

PCT/US2003/028547

2962/6881
FIGURE 2734

CCTCGGTTCCGCGGCGCACCGGAGGGCAGC**ATG**TCGCGGCGGCGGCACAGCGACGAGAACGACGGTGGGCAGCCT
CACAAAAGGAGAAAGACCTCTGATGCAAATGAACTGAAGATCATTGGGAATCTTTAATATGTAAAGTAGGAGAA
AAGAGTGCCTGCTCTTTGGAGAGCAACCTAGAAGGCTTGGCTGGTGTGTTTGGAAAGCTGATCTTCCTAACTACAAG
AGCAAGATCTTAAGGCTTCTTTGTACAGTTGCACGCCTATTACCTGAGAAGCTGACAAATTTATACAACATTAGTT
GGACTACTGAATGCCAGGAATTACAATTTTGGTGGAGAATTTGTAGAAGCCATGATTTCGTCAACTTAAAGAATCA
TTGAAAGCAAACAATTATAATGAAGCCGTGTATTTGGTCCGTTTTTTATCTGATCTTGTGAATTGTCATGTGATT
GCCGCCCCATCAATGGTTGCTATGTTTGAAAATTTTGTAAAGCGTAACCTCAGGAAGAAGATGTACCTCAGGTGCGA
CGAGATTGGTATGTGTATGCATTTCTGTTCATCTTTGCCCTGGGTGGAAAGGAGTTGTACGAAAAGAAAGATGCA
GAGATGGACCGCATCTTTGCCAACACTGAAAGCTATCTTAAAGACGCCAAAAGACTCATGTACCCATGTTACAG
GTATGGACTGCTGATAAAACCACATCCACAAGAAGAGTATTTAGATTGCCTGTGGGCCAGATTGAGAAATGAAA
AAGGATCGCTGGCAGGAACGGCACATCCTAAGACCTTATCTTGCCTTTGACAGCATCCTGTGTGAAGCACTGCAG
CACAATCTGCCTCCTTTTACACCACCTCCTCACACTGAAGATTCAGTGTACCCAATGCCAAGGGTCATCTTCAGA
ATGTTTGATTACACAGATGATCCCGAGGGTCTGTCTATGCCAGGGAGTCATTGAGTGGAAAGATTTGTAATAGAA
GAGAATCTTCACTGCATCATTAAAGTCCCACTGGAAGGAAAGGAAGACTTGTGCTGCACAGTTAGTGAGCTATCCA
GGGAAGAACAAGATCCCCCTGAACTACCACATAGTTGAGGTGATCTTTCAGAGCTGTTTCAACTTCCAGCACCC
CCTCACATTGATGTGATGTACACAACACTCCTCATTGAACTGTGCAAACCTTCAACCTGGCTCTCTACCCCAAGTT
CTTGACAGGCAACTGAAATGCTATACATGCGTTTGGACACAATGAACACTACCTGTGTAGACAGGTTTATTAAT
TGGTTTTCTCATCATCTAAGTAACCTCCAGTTCCGTTGGAGCTGGGAAGATTGGTCAGATTGTCTTAGTCAAGAT
CCTGAAAGTCCCAAACCGAAGTTTGTAAAGAGAAGTTCTAGAAAATGTATGAGGTTGTCTTACCATCAGCGTATA
TTAGATATTGTTTCTCTACCTTCTCAGCTCTGTGTCTGCAAACCCAACCTGCATTTACAAGTATGGAGATGAA
AGTAGCAATTCTCTTCTGACATTCTGTTGCCCTCTGTTTAGCTGTTGCCTTTTAAAGTAAGGCAACCAATGAT
GAAATCTTCAGCATTCTGAAAGATGTACCAAATCCTAACCAGGATGATGACGACGATGAAGGATTCAGTTTAAAC
CCATTGAAAATAGAAGTCTTTGTACAGACTCTGCTACACTTGGCAGCCAAATCATTACGCCACTCCTTCAGTGCT
CTTGCAAAGTTTCATGAAGTCTTCAAAACCTAGCTGAAAGTGATGAAGGAAAGTTACATGTGCTAAGAGTTATG
TTTGAGGTCTGGAGGAACCATCCACAGATGATTGCTGTACTAGTGGATAAGATGATTTCGTACACAAATAGTTGAT
TGTGCTGCCGTAGCAAATTGGATCTTCTCTTCAGAACTATCTCGTGACTTTACCAGATTGTTTGTTTGGGAAATT
TTGCACCTCTACAATTTCGTAAGATGAACAAACATGTCTCTGAAGATCCAGAAAGAGCTGGAAGAAGCTAAAGAGAAA
CTTGCTAGGCAACACAAACGGCGAAGTGATGATGACGACAGAAGCAGTGACAGGAAAGACGGGGTTCTTGAGGAA
CAAATAGAACGACTTCAGGAAAAAGTGGAATCTGCTCAGAGTGAACAAAAGAATCTTTTCCTCGTTATATTTCAG
CGGTTTATCATGATCTTGACCGAGCACCTAGTACGATGCGAAACTGATGGGACCAGTGTATTAACACCATGGTAT
AAGAACTGTATAGAGAGGCTGCAGCAGATCTTCCTACAGCATACCAAATAATCCAGCAGTACATGGTGACCCTG
GAGAACCTTCTCTTCACTGCTGAATTAGACCCTCATATCTTGGCCGTGTTCCAGCAGTTCTGTGCCCTGCAGGCC
TAAGGGTCAATTTTTCTCATGTCAAGTTTTTTTTTGATACTTAAATAATTTGTCTTATTTTTTGATGGTTTG
AATGCTTGCTTTCTTGTAGTATCCTTTCACTTCTTAAAGGAAACAAAGGGGAAGAGGACAGTGAATGAACATGGC
ATTACTTTTAATTGCCCTGAAAAGCAAATACTTCTAACGGCAGTAATGTGACTATGACCATGATATATTATATA
TGTGACAGATACAAATCTCTGTGATCAGTTTGTATTTTTTTCTCCTTAAGGCAACAAAATAATTGGTTTGAG
GTATGTGAAACACTAGAGGTCAACCTTACATAGTATATAGAAGTGTGGGTTTACCCAGCTACCCAGTAGCATAA
CTTTTCACAGCTCGGGGATGAATTAACATGGCTGAAATAAACTAAAAGTATG

WO 2004/030615

PCT/US2003/028547

2963/6881

FIGURE 2735

MSRRRHSDENDGGQPHKRRKTSANETEDHLES LICKVGEKSACSLESNLEGLAGVLEADLPNYKSKILRLLCTV
ARLLPEKLTIIYTTLVGLLNARNYNFGGEFVEAMIRQLKESLKANNYNEAVYLVRFLSDLVNCHVIAAPSMVAMFE
NFVSVTQEEDVPQVRDWDYVYAFLSSLPWVGKELYEKKDAEMDRIFANTESYLRKRRQKTHVPMQLQVWTADKPHPO
EEYLDCLWAQIQKLKKDRWQERHILRPYLAFDSILCEALQHNLPPTPPPHTEDSVYPMPRVIFRMFDYTDDPEG
PVMPGSHSVERFVIEENLHCIIKSHWKERKTCAAQLVSYPGKNKIPLNYHIVEVIFAE L FQLPAPPHIDVMYTTL
LIELCKLQPGSLPQVLAQATEMLYMRD TMNTTCVDRFINWFSHHL SNFQFRWSWEDWSDCLSQDPESP KPKFVR
EVLEKCMRLSYHQRI LDIVPPTFSALCPANPTCIYKYGDESSNSLP GHSVALCLAVAFKSKATNDEIFSILKDVP
NPNQDDDDDEGFSFNPLKIEVFVQTLLHLAAKSF SHSFSALAKFHEVF KTLAESDEGKLHVLRVMFEVWRNHPQM
IAVLVDKMIRTQIVDCAAVANWIFSS ELSRDFTRLFVWEILHSTIRKM NKHVLKIQKELEEAKEKLARQHKRRSD
DDDRSSDRKDGVL EEQIERLQEKVES AQSEQKNLFLVIFQRFIMILTEHLVRCETDGT SVLTPWYKNCIERLQQI
FLQHHQIIQQYMTLENLLFTAELDPHILAVFQQFCALQA

WO 2004/030615

PCT/US2003/028547

2964/6881

FIGURE 2736

CGGCTGTAATCTCAGAGGCTTGTTTGCTGAGGGTGCCTGCGCACGTGCGACGGCTGCTGGTTTTGAAACATGAAT
CTTTCGCTCGTCTGGCTGCCTTTTGCTTGGGAATAGCCTCCGCTGTTCCAAAATTTGACCAAAATTTGGATACA
AAGTGGTACCAGTGGAAGGCAACACACAGAAGATTATATGGCGCGAATGAAGAAGGATGGAGGAGAGCAGTGTGG
GAAAAGAATATGAAAATGATTGAACTGCACAATGGGGAATACAGCCAAGGGAAACATGGCTTCACAATGGCCATG
AATGCTTTTCTGACATGACCAATGAAGAATTCAGGCAGATGATGGGTTGCTTTCGAAACCAGAAATTCAGGAAG
GGGAAAGTGTTCCGTGAGCCTCTGTTTCTTGATCTTCCCAAATCTGTGGATTGGAGAAAGAAAGGCTACGTGACG
CCAGTGAAGAATCAGAAACAGTGTGGTTCTTGTGGGCTTTTAGTGCGACTGGTGCTCTTGAAGGACAGATGTTT
CGGAAACTGGGAACTTGTCTCACTGAGCGAGCAGAATCTGGTGACTGTTGCGCTCCTCAAGGCAATCAGGGC
TGCAATGGTGGCTTCATGGCTAGGGCCTTCCAGTATGTCAAGGAGAACGGAGGCCTGGACTCTGAGGAATCCTAT
CCATATGTAGCAGTGGATGAAATCTGTAAGTACAGACCTGAGAATTCTGTTGCTAATGACACTGGCTTCACAGTG
GTCGCACCTGGAAGGAGAAGGCCCTGATGAAAGCAGTCGCAACTGTGGGGCCCATCTCCGTTGCTATGGATGCA
GGCCATTCTGCTCTCCAGTTCTACAAATCAGGCATTTATTTTGAACCAGACTGCAGCAGCAAAAACCTGGATCAT
GGTGTCTGTTGGTGGTTGGCTACGGCTTTGAAGGAGCAAATTCGAATAACAGCAAGTATTGGCTCGTCAAAAACAGC
TGGGGTCCAGAATGGGGCTCGAATGGCTATGTAAAAATAGCCAAAGACAAGAACAACCACTGTGGAATCGCCACA
GCAGCCAGCTACCCCAATGTGTGAGCTGATGGATGGTGAGGAGGAAGGACTTAAGGACAGCATGTCTGGGGAAAT
TTTATCTTGAACTGACCAACGCTTATTGTGTAAGATAAACAGTTGAATCATTGAGGATCCAAGTTGAGATTT
TAATTCTGTGACATTTTTACAAGGGTAAAATGTTACCACTACTTTAATTATTGTTATACACAGCTTTATGATATC
AAAGACTCATTGCTTAATTCTAAGACTTTTGAATTTTCATTTTTTAAAAAGATGTACAAAACAGTTT

WO 2004/030615

PCT/US2003/028547

2965/6881
FIGURE 2737

MNLSLVLAAFCLGIASAVPKFDQNLDTKWYQWKATHRRRLYGANEEGWRRRAVWEKNMKMIELHNGEYSQGKHGFTM
AMNAFPDMTNEEFQMMGCFRNQKFRKGKVFREPLFLDLPKSVDWRKKGYVTPVKNQKQCGSCWAFSATGALEGQ
MFRKTGKLVSLSEQNLVDCSRPQGNQGCNGGFMARAFQYVKENGGLDSEESYPYVAVDEICKYRPENSVANDTGF
TVVAPGKEKALMKAVATVGPISVAMDAGHSSFQFYKSGIYFEPDCSSKNLDHGVLVVGYGFEGANSNNISKYWLVK
NSWGPEWGSNGYVKIAKDKNNHCGIATAASYPNV

WO 2004/030615

PCT/US2003/028547

2966/6881

FIGURE 2738

ATGAAGATCAAGATCGTGACAGGCAGTGGCGCGAGGCTTGAGTTGGGAAACCAGTTCTCCCACTTCATTAATAAT
GATGTCGATGTTTCCTGGCAGTGTATATACCAAATGCTACTTTGACCTTTGCGCCTTGGCACACGACAGTAGCCTA
TATTGCCATTTTGTCTTCTTGACATAGAAAGAGCATGGGAACTGAAGGTAATAAAAGCTGGAATTTATGCAGCTC
TTTCGGTCTCCACAGCTCGGGGTCTTGCCACAGACACAGCGCCACGAGTTCTGGCACTTTGGTCAACGTTTATA
AACGGGCTCTCCTCTGCCGCCGCGGGCATGCGCTTTCCCAAGACTCTGAGGCCACTTTTGCTCTCAGAGGCACA
CAGAAGAGACATCGGGCGCATGGCAAGCGGGCAGCTGAAGATGATGAGGATGATGATGTCGATACCAAGAAGCAG
AAGACCGACAAGGATGACTTAG

WO 2004/030615

PCT/US2003/028547

2967/6881
FIGURE 2739

MKIKIVTGS GARLELGNQFSHF INNDVDVPGSVYTKCYFDLCALAH DSSLYLPFCLLDIERAWELKVIKLEFMQL
FRSPQLGVLPQTQRPRVLALWSTF INGLSSAAAGMRFPQDSEATFALRG TQKRHRAHGKRAAEDDEDDVDTKKQ
KTDKDD

WO 2004/030615

PCT/US2003/028547

2968/6881

FIGURE 2740

GCCAGCTGCCGGTCTTTTCGGGGGCTCCGTAACTTTCTATCCGTCCGCGTCAGCGCCTTGCCACCCTCATCTCCAA
TATGCCTGGTCCGACCCCCAGTGGCACTAACGTGGGATCCTCAGGGCGCTCTCCAGCAAAGCAGTGGCCGCCCCG
GGCGGCGGGATCCACTGTCCGGCAGAGGAAAAATGCCAGCTGTGGGACAAGGAGTGCAGGCCGCACAACCTCGGC
AGGCACCGGGGGGATGTGGCGATTCTACACAGAAGATTCACCTGGGCTCAAAGTTGGCCCTGTTCCAGTATTGGT
TATGAGTCTTCTGTTTCATCGCTTCTGTATTTATGTTGCACATTGGGGCAAGTACACTCGTTCTAGATTTCAGTT
ACATCCATCTGTCATCTGAAGAAGGAGGAAAAAACCAACATTTCTTGGACCAAAGTATAGTGACTATCTGTTC
ATGAGAGAAATTTTCTGTAAGCTTGCTGTTTTACAGGGGATTTATCAATAATTGATTTTGAGGAATCAGTTTTTT
TCTATGGCTAATAAACTTTTTAATTCATTATACTGAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2969/6881
FIGURE 2741

MPGPTPSGTVNGSSGRSPSKAVAARAAGSTVRQRKNASCGTRSAGRTTSAGTGGMWRFYTEDSPGLKVGPVPVLV
MSLLFIASVFMLHIWGKYTRS

WO 2004/030615

PCT/US2003/028547

2970/6881
FIGURE 2742

ATGTCTACTCCTTCTGGAATATCCACCTGGCTCAGCCTGCCTGTTTCGACTCCTGCCTCCATCACATCCATCAGA
GTGACCCAGAAGTCCTCTGGCCCTGGGCCTTCAGCAGCTGCACCTACGTGAGTGGGCCTGGCGTCTGCATCAGC
TCCTTGAGCTGCTCCCGAGTGGGGAGCAGCAGCTTTGGGGTGGCCTGGGTGGAGGCTATGGTGGGGCCAGTGGC
ATGGGAGGCATCATCGCCATCATGGTCAACCAGAGCCTGTTGAGCCCCCTTAACCTGGAGGTGGACCCCAACATC
CAGGCCGTGTGTACCCAGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATCGACAAGGTA
TGGTTCTTGAGCAGCAGAACAAGGTGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGATGGCTCGGAGT
AACATGGACAACATGTTGGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAGGAGAAGCTG
AAGCTGGAAGCAGAGCTTGGCAACATGCAGGGGCTGGGGGAGGACTTCAAGAACAAGTATGAGGATGAGATCAAT
AAGCATACGGAGGTGGAGAATGAATTTGTCCTCATCAAGAAGGATGTTGATGAAGCTTACATGAACAAGGCAGAA
CTGGAGTCCCTCCTGGAAGGGCTGACTGACGAGATCAACTTCCTCAGGCAGCTGTATGAAGAGGAGATCCGGGAG
CTGCAGTCCCAGATCTCCGACATGTCTATGGTGTGTCCATGGACTACAGCTGCTCTCGGGACATGGACAGCATC
ATCCCTGAGGTCAAGGTGCAGTATGAGGAGATTGCCAACTGCAGCCGGGCTGAGGCTGAGAGCATGTACCAGATC
AAGTATGAGGAGCTGCAGACGCTGGCTGGGAAGTACGGGGATGACCTAAGCCGCACAAAGACTGAGATCTCCGAG
ATGAACCGGAACATCAGCTGGCTCCAGGCTGAGACCGAGGGCCTCAAAGGCCAGAGGGCTTCCCTGGAGGCCGCC
ATCACAGATGCCGAGCAGCGTGGGGAGCTGGCTGTTAAGGATGCCAACGCCAAGCTGTCCGAGCTGGAGGCCGCC
CTGCAGCGGGCCAAGCAGGACATGATGGGGCAGCTGCGTGAGTACCAGGAGCTGATGAACGTCGGGCTTACCCTG
GACATCGAGATTGCCACCTACAGGAAGCTGCTGGAGGGCGAGGAGAGCCGGCTGGAATCTGGGATGCAGAACGTG
AGTATCCATACGAAGACCACCAGCAGCTATGCAGGTGGGCTGAGCTCGGCCTATGGGGGCCTACAAGCCCCGGC
ATCATCTACCGCTGGGCTCCAGCTTTGGCTCTGCCGCGGGCTCCAGCTCCTTCAGCCGCACCAGCTCCACCAGG
GCCGTGGTTGTGAGGAAGATCGAGACCCATGATGGCAAGCTGGAGTCCGAGTCCTCTGACGTCCTGTCCAAGTGA

WO 2004/030615

PCT/US2003/028547

2971/6881
FIGURE 2743

MSTPSGISTWLSLPVSTPASITSIRVTQKSSGPWAFSSCTYVSGPGVCISLSCSRVGSSSFRGGLGGGYGGASG
MGGIIAIMVNQSLLSPLNLEVPNIQAVCTQEKEQIKTLNNKFASFIDKVVWFLEQQNKVLETKWSLLQQQKMARS
NMDNMLESYINNLRRLQLETLGQEKLEAELGNMQGLGEDFKNKYEDEINKHTEVENEFVLIKKDVDEAYMNKAE
LESLLLEGLTDEINFLRQLYEEEIRELQSQISDMSMVLSDYSCSRDMSIPEVKVQYEEIANCSRAEAESEMYQI
KYEELQTLAGKYGDDLSRTKTEISEMNRNISWLQAETGLKGQRASLEAAITDAEQRGELAVKDANAKLSELEAA
LQRAKQDMMGQLREYQELMNVGLTLDIEIATYRKLEGEESRLESGMQNVSIHTKTTSSYAGGLSSAYGGLTSPG
IIYRLGSSFGSAAGSSSFRTSSSTRAVVVRKIETHDGKLESESSDVLK

WO 2004/030615

PCT/US2003/028547

2972/6881
FIGURE 2744

AAAAACATGATGAGAAGTCTATAAAAAATTGTGTGCTACCAAAGATCTGTCTTATTTGGCAGCTGCTGCCTCACCC
ACAGCTTTTGTATCTAGGAGGACTCTTCTCTCCCAAACCTACCTGTCACCATGCCCCACCGATTTCAGCCCTCA
CCCAGGAGCAGAAGAAGGAGCTCTCAGAAATTGCCAGAGCATTGTTGCCAATGGAAAGGGGATCCTGGCTGCAG
ATGAATCTGTAGGTACCATGGGGAACCGCCTGCAGAGGATCAAGGTGGAAAACACTGAAGAGAACCGCCGGCAGT
TCCGAGAAATCCTCTTCTCTGTGGACAGTTCCATCAACCAGAGCATCGGGGGTGTGATCCTTTTCCACGAGACCC
TCTACCAGAAGGACAGCCAGGGAAAGCTGTTCAAGAAACATCCTCAAGGAAAAGGGGATCGTGGTGGGAATCAAGT
TAGACCAAGGAGGTGCTCCTCTTGCAGGAACAAACAAAGAAACCACCATTCAAGGGCTTGATGGCCTCTCAGAGC
GCTGTGCTCAGTACAAGAAAGATGGTGTGACTTTGGGAAGTGGCGTGCTGTGCTGAGGATTGCCGACCAGTGTC
CATCCAGCCTCGCTATCCAGGAAAACGCCAACGCCCTGGCTCGCTACGCCAGCATCTGTCAGCAGAATGGACTGG
TACCTATTGTTGAACCAGAGGTAATTCTGATGGAGACCATGACCTGGAACACTGCCAGTATGTTACTGAGAAGG
TCCTGGCTGCTGTCTACAAGGCCCTGAATGACCATCATGTTTACCTGGAGGGCACCCTGCTAAAGCCCCAACATGG
TGACTGCTGGACATGCCTGCACCAAGAAGTATACTCCAGAACAAGTAGCTATGGCCACCGTAACAGCTCTCCACC
GTACTGTTTCTGCAGCTGTTTCTGGCATCTGCTTTTTGTCTGGTGGCATGAGTGAAGAGGATGCCACTCTCAACC
TCAATGCTATCAACCTTTGCCCTCTACCAAAGCCCTGGAAACTAAGTTTCTCTTATGGACGGGCCCTGCAGGCCA
GTGCACTGGCTGCCTGGGGTGGCAAGGCTGCAACAAGGAGGCAACCCAGGAGGCTTTTATGAAGCGGGCCATGG
CTAACTGCCAGGCGGCCAAAGGACAGTATGTTACACGGGTTCTTCTGGGGCTGCTTCCACCCAGTCGCTCTTCA
CAGCCTGCTATACCTACTAGGGTCCAATGCCCGCCAGCCTAGCTCCAGTGCTTCTAGTAGGAGGGCTGAAAGGGA
GCAACTTTTCTCCAATCCTGGAAATTCGACACAATTAGATTTGAACTGCTGGAAATACAACACATGTTAAATCT
TAAGTACAAGGGGGAAAAAATAAATCAGTTATTGAAACATAAAAAATGAATACCAAGGACCTGATCAAAATTCACA
CAGCAGTTTCTTGCAACACTTTTCACTCCCCATGCTCCAGAATACCCACCCAGAAAATAATAGGCTTTTAAAC
AATATCGGCTCCTCATCAAAGAACAACCTGCTGATTGAAACACCTCATTAGCTGAGTGTAGAGAAGTGCATCTTA
TGAAACAGTCTTAGCAGTGGTAGGTTGGGAAGGAGATAGCTGCAACCAAAAAAGAAATAAATATTCTATAAACCT
TC

WO 2004/030615

PCT/US2003/028547

2973/6881
FIGURE 2745

MAHRFPALTQEQKKELSEIAQSIVANGKGILAADESVGTMGNRLQRIKVENTEENRRQFREILFSVDSSINQSIG
GVILFHETLYQKDSQGKLFERNILKEKGIVVGIKLDQGGAPLAGTNKETTIQGLDGLSERCAQYKKDGVDFGKWRA
VLRIADQCPSSLAIQENANALARYASICQONGLVPIVEPEVIPDGDHDLHCQYVTEKVLAAVYKALNDHHVYLE
GTLKPNMVTAGHACTKKYTPEQVAMATVTALHRTVPAAVPGICFLSGGMSEEDATLNLNAINLCPLPKPWKLSF
SYGRALQASALAAWGGKAANKEATQEAFMKRAMANCQAAKGQYVHTGSSGAASTQSLFTACYTY

WO 2004/030615

PCT/US2003/028547

2974/6881
FIGURE 2746

GCCGCTTTGGGGGCCGCGGTCTCTCCGCAGCTCGCGGGTCACATGGCCCGCCTGAGCAAGGGGAGCCCTGCGCCT
GAGCTGCGAGGCGGGAGGAGGTGAGGCTCCGGCGCACACCCAAACCGCGCTGCGCCCGCTCCTTCCGGGCCCCGG
AGATGGCGCCTCCACCGGGATGAGCTAGCCAGCCTGGGCAATACCAGAGGCGGCCCTCGGCGCGCGCAGGGGACC
GAGCTGGTCGCCCCAACCGGGTTTGATTTCTGATGACTCTGGCCTGAGTTCCAGGATGGTTTTTTCTTGGGACCA
GACATGAACAAAAGTTGACCTCATGAGCACTTCAACCTCTCCAGCTGCCATGCTCCTCCGGAGGCTGCGGCGACT
GTCTGGGGCAGCACTGCTGTCCAGCTCTTCATCCTAACAGTGGTGACGTTTGGCCTGCTGCCCCCCTGGCCTG
TCACCGACTTCTACACTCTTACTTCTATCTGCGCCATTGGCATCTGAACCAAATGAGCCAAGAGTTCTTGCAGCA
AAGCTTGAAAGAGGGTGAGGCTGCCCTCCACTATTTTGAGGAGCTTCCCTCTGCCAATGGCTCAGTGCCCCATTGT
CTGGCAGGCCACCCCCGGCCCTGGCTGGTGATCACCATCATCACTGTGGACAGGCAGCCTGGCTTCCACTACGT
CCTGCAGGTTGTGTCCAGTTCCACCGGCTTCTTCAGCAATGTGGCCCCCAGTGCGAGGGGCACCAACTCTTCCT
GTGCAACGTGGAGCGTAGTGTGAGCCATTTTGATGCCAAGTTGCTCTCCAAGTATGTCCCTGTGGCCAATCGCTA
TGAGGGCACTGAGGATGATTATGGTGATGACCCTTCGACCAACTCGTTTGAGAAAGAGAAGCAGGACTATGTCTA
TTGCCTGGAGTCATCCCTGCAGACCTACAACCCAGACTACGTCTGTAGGTAGAAGACGATGCTGTACCAGAAGA
GCAGATCTTCCAGTCTTGAGCACCTTCTGCGGGCTCGCTTCTCTGAGCCACATCTCAGAGATGCCCTTTATCT
CAAGCTGTATCACCCGAGAGGCTCCAGCACTACATCAATCCAGAGCCCATGCGGATCCTGGAATGGGTGGTGT
AGGCATGTTGCTGGGGCCCTTACTAACCTGGATATACATGAGGTTTGCCAGCCGCCAGGGTTTAGCTGGCCTGT
AATGCTCTTCTTCTCCCTGTATAGCATGGGTCTGGTGGAGCTGGTGGGTGGGCACTATTTCTGGAAGTGCAGCG
GCTGAGTCCTTCCCTGTACAGTGTGGTTCTGCTCTCAGTGTGACCCAGCCATGCTCTTCCCGGCACCTGC
GGCCCGCCGGACCCCTCACCTACCTGTCCCAAGTGTAAGTGGCCACAAGGGCTTTGGCAAGGACATGGCACTGTACTC
GCTGTTGAGGGCCAAGGGAGAGAGGGCCTATGTAGTGGAGCCGAACCTCGTGAAACACATCGGGCTCTTCTCCAG
TCTCCGGTACAACCTTTCATCCAGTCTCCTCTAGGGTGCCAAGAGATGCCTTTCTGAAGTTGGCCACTTCTTGAA
GATTCAAATATTTATCTCTTTATTTAGACATGGTTGCTTGCAGGTATTTCACTGTTTACTGTTGTTAGAGATATA
GGCACTGGGGCAGCTGAGGAACCTCAATATGTTAAGAGCCTTGGCTTTGGTAGCCTCCTGGCAGGAGCAGCAGTT
TGCCACAGGTCCGGACCTCTCCCTCCACACAGCCCACTGCCTCATGCAGTCTGACCCACCCAGTGAGGGTGCAT
TTGAACACTGATTATATTCTCCATTTGTTTTTAAGCTCTGCTTTGTGTTAGAGCTTGTGACTGCCAAAAATTTTG
TGCACAGTGATATGACTGTTTTAGGATCTTAAGGGTAGAATTTTGTGAAAGGTGAGATCCTTTGGAATTGAGTTC
TTTCTCATTGGGTATGAAAATGGATGTATGTTTAGAATATATGCCCAACGAGGCAGGACCATGTGGATAGATTCC
ATTTGTTTCCTTGACCTGATGTAATAAAAACTGATAAAAGCCGTGCAGTGCCCGGCATCTTGAAAAA
AAAAA

WO 2004/030615

PCT/US2003/028547

2975/6881
FIGURE 2747

MSTSTSPAAMLLRRLRRLSWGSTAVQLFILT VVTFGLLAPLACHRLLHSYFYLRHWHLNQMSQEFLOQSLKEGEA
ALHYFEELPSANGSVPIVWQATPRPWL VITIIITVDRQPGFHYVLQVVSQFHRLLQQCGPQCEGHQLFLCNVERSV
SHFDAKLLSKYVPVANRYEGTEDDYGDDPSTNSFEKEKQDYVYCLESSLQTYNPDYVLMVEDDAVP EEQIFPVLE
HLLRARFSEPHLRDALY LKLYHPERLQHYINPEPMRILEWVGVM L L G P L L T W I Y M R F A S R P G F S W P V M L F F S L Y
SMGLVELVGRHYFLELRRLSPSLYSVVPASQCCTPAMLF PAPAARRTLTYLSQVYCHKGF GKDMALYSLLRAKGE
RAYVVEPNLVKHIGLFSSLRYNFHP SLL

WO 2004/030615

PCT/US2003/028547

2976/6881
FIGURE 2748

GAGATACGCGCACACACACACACAAAACGCACTCAGATTTCCCGGACCCTGGTTTTCTCCTGTGACCCTTTTCGGG
GCCGGGCTCTCACCCTAAAGAAGCAGCCCCGCCCTGGGGTGGCCCCACCCTCTCTTGGGACCTGTCATAAGTCGG
ACCCCGGGCGCCCGGCTGCGCAGTCCCAGCCGCCTTCCCCAGGCAGTGGAACCTTCGGGCTCCTGAGCTTCAGGA
TGGTTCGTACTAAGACATGGACCCTGAAGAAGCACTTTGTTGGCTATCCTACTAATAGTGACTTTGAGTTGAAGA
CAGCTGAGCTCCCACCCTTAAAAAATGGAGAGGTCTTGCTTGAAGCTTTGTTCCCTCACCCTGGATCCCTACATGA
GAGTGGCAGCCAAAAGATTGAAGGAAGGTGATACAATGATGGGGCAGCAAGTGGCCAAAAGTTGTGGAAAGTAAAA
ATGTAGCCCTACCAAAGGAACCTATTGTACTGGCTTCTCCAGGCTGGACAACGCACTCCATTTCTGATGGGAAAG
ATCTGGAAAAGCTGCTGACAGAGTGGCCAGACACAATACCACTGTCTTTGGCTCTGGGGACAGTTGGCATGCCAG
GCCTGACTGCCTACTTTGGCCTACTTGAATCTGTGGTGTGAAGGGTGGAGAAAACAGTGATGGTTAATGCAGCAG
CTGGAGCTGTGGGCTCAGTCGTGGGGCAGATTGCAAAGCTCAAGGGCTGCAAAGTTGTTGGAGCAGTAGGGTCTG
ATGAAAAGGTTGCCTACCTTCAAAGCTTGGATTGATGTCGTCTTAACTACAAGACGGTAGAGTCTTTGGAAG
AAACCTTGAAGAAAGCGTCTCCTGATGGTTATGATTGTTATTTTGATAATGTAGGTGGAGAGTTTTCAAACACTG
TTATCGGCCAGATGAAGAAATTTGGAAGGATTGCCATATGTGGAGCCATCTCTACATATAACAGAACCGGGCCAC
TTCCCCCAGGCCACCCCCAGAGATTGTTATCTATCAGGAGCTTCGCATGGAAGCTTTTGTCTCTACCGCTGGC
AAGGAGATGCCCGCCAAAAGCTCTGAAGGACTTGCTGAAATGGGTCTTAGAGGGTAAAAATCCAGTACAAGGAAT
ATATCATTGAAGGATTTGAAAACATGCCAGCTGCATTTATGGGAATGCTGAAAGGAGATAATTTGGGGAAGACAA
TAGTGAAAGCATGAAAAAGAGGACACATGGAATCTGGAGGCCATTTAGATGATTAGTTAATTTGTTTTTACCAT
TTAGCAAAAATGTATACTACCTTAAATGTCCTAAGAAATAGTACTCATAATGAGTTTGAGCTACTTAATAAAATA
CATTTAAGTGGTATGTAA

WO 2004/030615

PCT/US2003/028547

2977/6881

FIGURE 2749

MVRTKTWTLKKHFVGYPTNSDFELKTAELPPLKNGEVLLLEALFLTVDPYMRVAAKRLKEGDTMMGQQVAKVVESK
NVALPKGTIIVLASPGWTTHSISDGKDLEKLLTEWPDITIPLSLALGTVGMPGLTAYFGLLEICGVKGGETVMVNAA
AGAVGSVVGQIAKLKGCKVVGAVGSDEKVAYLQKLGFDDVFNKYKTVESLEETLKKASPDGYDCYFDNVGGEFSNT
VIGQMKKFGRIAICGAISTYNRTGPLPPGPTPRDCYLSGASHGSFCRLPLARRCFFPKSSEGLAEMGLRG

WO 2004/030615

PCT/US2003/028547

2978/6881
FIGURE 2750

GAACCTCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCTCCCGACATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTGTTCCTTTGGCCACGTATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGTATTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATGTGC
ATATTGAGCACATTAAGCACTCTGAGCCGAGATAGCTTCCTGAAATGTGTGAAGGAAAATGATCAGAAAAAGAAA
GAAGCCAAAGAGAAAGGTACCTGGGTTCAACTGAAGTGCCAGCCTGCTCCACCCAGAGAAGCACACTTTGTGAGA
ACCAATGGGAAGGAGCCTGAACTGCTGGAACCTATTCCCTATGAATTCATGGCATAATAGGTGTTTAAAAAATAA
ATAAATAAAAGACCTCTGGGCTGTTA

WO 2004/030615

PCT/US2003/028547

2979/6881
FIGURE 2751

TGGACGGTCTGAAAGGGAGTGTTCCGGGTTTCGCTGGGGCCTCGCGGCTCCAGAGCCCAGCATGGCTTCCTCGCGA
GCCTCTTCCACGCAGGCAACCAAACTAAAGCACCCGACGACTTAGTTGCTCCGGTCGTGAAGAAACCACACATC
TATTATGGAAGTTTGGAAGAGAAGGAGAGGGAGCGTCTGGCCAAAGGAGAGTCTGGGATTTGGGGAAAGACGGA
CTTAAAGCAGGGATCGAAGCTGGAAATATTAATATAACCTCTGGAGAAAGTGTGAAATTGAAGAGCGTATCAGC
GAGCGACAGGCAGAAGTATTGGCTGAGTTTGAGAGAAGGAAGCGAGCCCGGCAGATCAATGTTTCCACAGATGAC
TCAGAGGTCAAAGCTTGCCTTAGAGCCTTGGGGGAACCCATCACACTTTTGGAGAGGGTCTGCTGAAAGAAGA
GAAAGGTTAAGAAATATCCTCTCAGTTGTGCGTACTGATGCCTTGAAAAAGACCAAAAGGATGATGAGAAGTCT
AAAAAGTCCAAAGAAGAGTATCAGCAAACCTGGTATCATGAAGGACCAAATAGCTTGAAGGTGGCAAGACTATGG
ATTGCTAATTATTTCGTTGCCCAGGGCAATGAAACGCTTGGAAGAGGCCCGACTCCATAAGGAGATTCTGAGACA
ACAAGGACCTCCCAGATGCAAGAGCTGCACAAGTCTCTCCGGTCTTTGAATAATTTTGCAGTCAGATTGGGGAT
GATCGGCCTATCTCCTACTGTCACTTTAGTCCCAATTCCAAGATGCTGGCCACAGCTTGTTGGAGTGGGCTTTGC
AAGCTCTGGTCTGTTCTGATTGCAACCTCCTTCACACTCTTCGAGGGCATAACACAAATGTAGGAGCAATTGTA
TTCCATCCCAAATCCACTGTCTCCTTGGACCCAAAAGATGTCAACCTGGCCTCTTGTGCGGCTGATGGCTCTGTG
AAGCTTTGGAGTCTCGACAGTGATGAACAGTGGCAGATATTGAAGGCCATACAGTGCGTGTGGCGCGGGTAATG
TGGCATCCTTCAGGACGTTTCTGGGCACCACCTGCTATGACCGTTTCATGGCGCTTATGGGATTTGGAGGCTCAA
GAGGAGATCCTGCATCAGGAAGGCCATAGCATGGGTGTGTATGACATTGCCTTCCATCAAGATGGCTCTTTGGCT
GGCACTGGGGGACTGGATGCATTTGGTTCGAGTTTGGGACCTACGCACAGGACGTTGTATCATGTTCTTAGAAGGC
CACCTGAAAGAAATCTATGGAATAAATTTCTCCCCAATGGCTATCACATTGCAACCGGCAGTGGTGACAACACC
TGCAAAGTGTGGGACCTCCGACAGCGGCGTTGCGTCTACACCATCCCTGCTCATCAGAACTTAGTGACTGGTGTC
AAGTTTGAGCCTATCCATGGGAACCTTCTTGCTTACTGGTGCCTATGATAACACAGCCAAGATCTGGACGCACCCA
GGCTGGTCCCCGCTGAAGACTCTGGCTGGCCACGAAGGCAAAGTGATGGGCCTAGATATTTCTCCGATGGGCAG
CTCATAGCCACTTGCTCATATGACAGGACCTTCAAGCTGTGGATGGCTGAATAGATGACAATGGGAAAAGGACTT
GAACCTCAAGCTCTCTCTAAGGAGCTGTTTTCTCAAACGAGAAGAATTGAAGTGTGTTAGTTCTATCATGTTTTC
TGCCAATTACCATGCATAGACCCTCAGTAGAATTGGATTTCCATGTCAGCCCCACTCCAGGAAGGCAGCCCAAT
CCCTAGGTGATGGGGAACCCCTCTCACGGTTGAAAATTTATTACCTTTTTACGCCCTGCCACGAACGTGTAGAC
ATTGTTTTTTATTAATCTTTTGTGTTGGCCGGGCGTGGTGGCTCACGCCGTGTAATCCTAGCACTTTGGGAGGCCGAG
GTGGGTAGATCGCTTGAGCTCAGGAGTTCAAGACGAGCCTGGGCAACATGGCAAATGCCGTCTCTGCAAAAAAAT
ACTAAAATTAGCTGGTCGCGGTGGCTTCTGCCTGTGATTCCGGCTACTTGGGAGGCTGAGGTGGGAGGGATTGCT
TAAGCCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCGCCATTGCACTCTAGCCTGTGTGACAGAGCAAGACC
CTGTCTCAAAAA

WO 2004/030615

PCT/US2003/028547

2980/6881
FIGURE 2752

MASSRASSTQATKTKAPDDLVPVVKKPHIYYGSLEEKERERLAKGESGILGKDGLKAGIEAGNINITSGEVFEI
EERISERQAEVLAEFERRKRARQINVSTDDSEVKACLRALGEPITLFGEGPAERRERLRNLSVVGTDALKKTKK
DDEKSKKSKEEYQQTWYHEGPNSLKVARLWIANYS LPRAMKRLEEARLHKEIPETTRTSQMQLHKSLSLNNFC
SQIGDDRPISYCHFSPNSKMLATACW SGLCKLWSVPDCNLLHTLRGHNTNVGAIVFHPKSTVSLDPKDVNLASCA
ADGSVKLWSLDSDEPVADIEGHTVRVARVMWHPSGRFLGTTTCYDRSWRLWDLEAQEEILHQEGHSMGVYDIAFHQ
DGSLAGTGGLDAFGRVWDLRTGRCIMFLEGHLKEIYGINFSPNGYHIATGSGDNTCKVWDLRQRRCVYTIPAHQN
LVTGVKFEP IHGNFLLTGAYDNTAKIWITHPGWSPLKTLAGHEGKVMGLDISSDGQLIATCSYDRTFKLWMAE

WO 2004/030615

PCT/US2003/028547

2981/6881
FIGURE 2753

GGCACGAGGGACGCGGGAAGTCCGGACGCAGTAGCTCCCTGAAGCGGAGGCGAAGGGGAGTTTAAGCCCCAGCGG
CGGCAATGGCGGAGAGGGCCCGAGGACCTAAACCTGCCCAATGCCGTGATCACCAGGATCATCAAGGAGGCGCTCC
CGGACGGTGTCAACATCTCCAAGGAGGCCCCGAGCGCCATCTCCCGCGCCGCCAGCGTCTTCGTGCTGTACGCCA
CATCCTGTGCTAACAACCTTTGCAATGAAAGGAAAGCGGAAGACGCTGAATGCCAGTGATGTGCTCTCAGCCATGG
AAGAGATGGAGTTCAGCGGTTTCGTTACCCCATGAAAGAAGCTCTGGAAGCATATAGCGGGAGCAGAAAGGCA
AGAAGGAGGCCTCAGAGCAAAAGAAGAAGGACAAAGACAAAAAACAGACTCGGAAGAGCAAGACAAGAGCAGGG
ATGAGGACAATGATGAAGACGAAGAAAGGCTGGAAGAAGAAGAACAGAATGAAGAGGAAGAAGTAGACAACTGAA
AAGGGCGGGAGACTGTGGCACCTTGGAAGGTACCCTTGAAATGAGACGTGCTACGTGTTCTGTGAAGCTTTTC
CATGCTGGGCAGAGTAGTCTCAGGCAAAAGTGCCTGAAAAGATCAGAATAAAAACTGACTAGAAATACCGTCAAA
ACCAGCACTTACCAAACCTCAGAGCATCTGAGTAGCAGAATCCTGTTTTGCTTCATCAATCTGAAGGTTATGGCCT
TTTGACAAGAGGGATTCTGAACGACTAAATTAGTCAGTTTGCTCGCTTTTGTCTTAAATGTATGGTTAGATG
GTTTTTGATCTGCAGTCTTCCCTAGTCCCCCAAATAAGTAATAATAACTTCCATGCTGCTGCTGTGTCCAGAT
CACAGAGGCAGCCAAGGCTCAGGAAAACTGGGGCTTTGCTTATGGTCAGCCTATGTTTGATTGCACAGTCTTTG
ACAATAGTAGCTTACTAAGACTGCTCAGAATGAGTAAGCTTTAGGAAACTACTAAAATGCTGTGGGAGAATAACA
AAATCCGTTCTCTCTCTTCACTTGACAGAAGCATTAACTGAATTTTGTCTTTTCATAGACCCACTTGGCCCCAAAC
CTTTCTATATTGCCTGTAGATGATCGGCCTGCTGGTGTGGTAGTAATCTGATCACAGATATTCTTAAATCAGCAG
TGTGGAATGGTATTAGTCAAACATGGTGCCAGTGTCTTTTACAAAAACAGATGGCATAAGTGCAGATGTACCTTA
CTCTCTGCTACTGTACAGCTTTAGGATTTGTCTACCTCCCGGAAGGTGTAAAACCCAGGCTTCCCTCTTCTTG
TAGTCCATCTCCCAGACTTGTGACTATGGCTTTTCACTTCTCAATTCTGACGAGTGCCAACTTGATTTTCTCT
AGGCACAGCTTTTCTCCCTCTGTGCCTCCTGCTTCTCTCTCTCCTGCCTCTCCTCTGCTCCCCATCCCCTTTCT
CATCTGCCTCCTTTTCTCACTTCTGTGAGTCTGTAAGCTTTGATAACCTGCTTAATACTCCAAAGTGTGAGTTCC
TCTGATCTCTTGATTCTTAGTTCTAATCTCACGTTTTGTTTTTAAGAGATGGAGTCTCTCACTCTGTGGCCAG
GCTGGAGTGCAGTGGCATGATCATAGCTCATTGCATCCTTGAATCCTGGGCTCAGGTGATCCTCCCGCCTGAGC
CTCCTGAGTATCTGGGACTACAGATGCGTGCCACCAAGCCTGGCTAATTTTGTCTCATGTCTTCTAAAAATTATT
TTGTGAAGCCCCTTCAAAAAACCTTAAGGGAAATCTGATGGTGCTCAGGAATCTAACTCTCCCTAAACCATCC
TCTTTAACTGCTTCTAAAAATATCTCTGTTGGCCTTTTCTAGCCTTTTTCTGTTTCCATTGAGTGTCCAAGCGCT
TTTTGTTTCTAAGTTGAGTGCCTGGGGTTTGACAGGTAGTGACGTGTAGTTTGACACTGTTAACTTGTAAATAC
AGTGAAGTTTGTGAGTGAAGAATGCTGAGAAGATTGTAATGCTTTGTACAAATAAAAGTCTTGTAAAAAAA
AAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2982/6881
FIGURE 2754

MAERPEDLNLPNAVITRIIKEALPDGVNISKEARSAISRAASVFVLYATSCANNFAMGKRKTLNASDVLSAMEE
MEFQRFVTPPLKEALEAYRREQKGKKEASEQKKKDKDKKTDSEEQDKSRDEDNDEDEERLEEEEEEQNEEEEVDN

WO 2004/030615

PCT/US2003/028547

2983/6881
FIGURE 2755A

ACCGGCCACAGCCTGCCTACTGTACCCGCGCTCTCCCGCGCGCAGATACACGCCCCCGCCTCCGTGGGCACAAAG
GCAGCGCTGCTGGGGAACCTCGGGGAACGCGCACGTGGGAACCGCCGAGCTCCACACTCCAGGTACTTCTTCCA
AGGACCTAGGTCTCTCGCCCATCGGAAAGAAAATAATTCTTTCAAGAAGATCAGGGACAACCTGATTGAGTCTA
CTCTGTGCTTCTAAATCCCCAATTCTGTGAAAGTGAGATACCCTAGAGCCCTAGAGCCCCAGCAGCACCAGCC
AAACCCACCTCCACCATGGGGGCAATGACTCAGCTGTTGGCAGGTGTCTTCTTGCTTTCCTTGCCCTCGCTACC
GAAGGTGGGGTCTCAAGAAAGTCATCCGGCACAAGCGACAGAGTGGGGTGAACGCCACCCTGCCAGAAGAGAAC
CAGCCAGTGGTGTTTAACCAGTTTACAACATCAAGCTGCCAGTGGGATCCCAGTGTTCGGTGGATCTGGAGTCA
GCCAGTGGGGAGAAAGACCTGGCACCAGCTTCAGAGCCCAGCGAAAGCTTTCAGGAGCACACAGTGGATGGGGAA
AACCAGATTGTCTTACACATCGCATCAACATCCCCCGCCGGGCTGTGGCTGTGCCGAGCCCCCTGATGTTAAG
GAGCTGCTGAGCAGACTGGAGGAGCTGGAGAACCCTGGTGTCTTCCCTGAGGGAGCAATGTACTGCAGGAGCAGGC
TGCTGTCTCCAGCCTGCCACAGGCCGCTTGGACACCAGGCCCTTCTGTAGCGGTGGGGCAACTTCAGCACTGAA
GGATGTGGCTGTGTCTGCGAACCTGGCTGGAAAGGCCCAACTGCTCTGAGCCCGAATGTCCAGGCAACTGTCAC
CTTCGAGGCCGGTGCATTGATGGGCAGTGCATCTGTGACGACGGCTTCACGGGCGAGGACTGCAGCCAGCTGGCT
TGCCCCAGCGACTGCAATGACCAGGGCAAGTGCCTAAATGGAGTCTGCATCTGTTTCGAAGGCTACGCCGGGGCT
GACTGCAGCCGTGAAATCTGCCAGTGGCCTGCAGTGAGGAGCACGGCACATGTGTAGATGGCTTGTGTGTGTGC
CACGATGGCTTTGCAGGCGATGACTGCAACAAGCCTCTGTGTCTCAACAATTGCTACAACCGTGGACGATGCGTG
GAGAATGAGTGCCTGTGTGATGAGGGTTTCACGGGCGAAGACTGCAGTGAGCTCATCTGCCCAATGACTGCTTC
GACCGGGGCCGCTGCATCAATGGCACCTGCTACTGCGAAGAAGGCTTCACAGGTGAAGACTGCGGGAAACCCACC
TGCCCCACATGCCTGCCACACCCAGGGCCGGTGTGAGGAGGGGCGAGTGTGTATGTGATGAGGGCTTTGCCGGTGTG
GACTGCAGCGAGAAGAGGTGTCTGTGACTGTGACAAATCGTGGCCGCTGTGTAGACGGGCGGTGTGAGTGTGAT
GATGGTTTCACTGGAGCTGACTGTGGGGAGCTCAAGTGTCCCAATGGCTGCAGTGGCCATGGCCGCTGTGTCAAT
GGCAGTGTGTGTGTGATGAGGGCTATACTGGGGAGGACTGCAGCCAGCTACGGTGCCCCAATGACTGTACAGT
CGGGGCCGCTGTGTGCGAGGGCAAATGTGTATGTGAGCAAGGCTTCAAGGGCTATGACTGCAGTGACATGAGCTGC
CCTAATGACTGTCAACAGCACGGCCGCTGTGTGAATGGCATGTGTGTTTGTGATGACGGCTACACAGGGGAAGAC
TGCCGGGATCGCCAATGCCCCAGGGACTGCAGCAACAGGGGCCCTCTGTGTGGACGGACAGTGCGTCTGTGAGGAC
GGCTTCACCGGCCCTGACTGTGCGAAGCTCTCCTGTCCAAATGACTGCCATGGCCAGGGTTCGTGTGTGAATGGG
CAGTGCCTGTGCCATGAAGGATTTATGGGCAAAGACTGCAAGGAGCAAAGATGTCCCAGTGACTGTCATGGCCAG
GGCCGCTGCGTGGACGGCCAGTGCATCTGCCACGAGGGCTTCACAGGCCCTGGACTGTGGCCAGCACTCCTGCCCC
AGTGAAGTGCACAACTTAGGACAATGCGTCTCGGGCCGCTGCATCTGCAACGAGGGCTACAGCGGAGAAGACTGC
TCAGAGGTGTCTCCTCCCAAAGACCTCGTTGTGACAGAAGTGACGGAAGAGACGGTCAACCTGGCCCTGGGACAA
GAGATGCGGGTCACAGAGTACCTTGTGCTGTACACGCCCACCCACGAGGGTGGTCTGGAAATGCAGTTCGGTGTG
CCTGGGGACAGAGCTCCACCATCATCCAGGAGCTGGAGCCTGGTGTGGAGTACTTTATCCGTGTATTGCCATC
CTGGAGAACAAGAAGAGCATTCCTGTGACGCGCCAGGGTGGCCACGTACTTACCTGCACCTGAAGGCCTGAAATC
AAGTCCATCAAGGAGACATCTGTGGAAGTGGAGTGGGATCCTCTAGACATTGCTTTTGAAACCTGGGAGATCATC
TTCCGGAATATGAATAAAGAAGATGAGGGAGAGATCACAAAAGCCTGAGGAGGCCAGAGACCTTTACCGGCCAA
ACTGGTCTAGCTCCTGGGCAAGAGTATGAGATATCTCTGCACATAGTGAAAAACAATACCCGGGGCCCTGGCCTG
AAGAGGGTGACCACCACACGCTTGGATGCCCCCAGCCAGATCGAGGTGAAAGATGTCACAGACACCACTGCCTTG
ATCACCTGGTTCAAGCCCCCTGGCTGAGATCGATGGCATTGAGCTGACCTACGGCATCAAAGACGTGCCAGGAGAC
CGTACCACCATCGATCTCAGAGGACGAGAACCAGTACTCCATCGGGAACCTGAAGCCTGACACTGAGTACGAG
GTGTCCCTCATCTCCCGCAGAGGTGACATGTCAAGCAACCCAGCCAAAGAGACCTTCACAACAGGCCTCGATGCT
CCCAGGAATCTTCGACGTGTTTCCCAGACAGATAACAGCATCACCCCTGGAATGGAGGAATGGCAAGGCAGCTATT
GACAGTTACAGAAATTAAGTATGCCCCCATCTCTGGAGGGGACCAAGCTGAGGTTGATGTTTCAAAGAGCCAAACA
GCCACAACCAAAACCACTCACAGGTCTGAGGCCGGGAATGAATATGGGATTGGAGTTTCTGCTGTGAAGGAA
GACAAGGAGAGCAATCCAGCGACCATCAACGACCCACAGAGTTGGACACGCCCAAGGACCTTCAGGTTTCTGAA
ACTGCAGAGACAGCCTGACCCTGCTCTGGAAGACACCGTTGGCCAAATTTGACCGCTACCGCCTCAATTACAGT
CTCCCCACAGGCCAGTGGGTGGGAGTGCAGCTTCCAAGAAACACCACTTCCTATGTCCTGAGAGGCCTGGAACCA
GGACAGGAGTACAATGTCTCCTGACAGCCGAGAAAGGCAGACACAAGAGCAAGCCCGCACGTGTGAAGGCATCC
ACTGAACAAGCCCCCTGAGCTGGAAAACCTCACCGTGAAGTGGCTGGGATGGCCTCAGACTCAACTGGACC

WO 2004/030615

PCT/US2003/028547

2984/6881
FIGURE 2755B

GCAGCTGACCAGGCCTATGAGCACTTTATCATTAGGTGCAGGAGGCCAACAAGGTGGAGGCAGCTCGGAACCTC
 ACCGTGCCTGGCAGCCTTCGGGCTGTGGACATACCGGGCCTCAAGGCTGCTACGCCTTATACAGTCTCCATCTAT
 GGGGTGATCCAGGGCTATAGAACCAGTGCTCTCTGCTGAGGCCTCCACAGGGGAACTCCCAATTTGGGAGAG
 GTCGTGGTGGCCGAGGTGGGCTGGGATGCCCTCAAACCTCAACTGGACTGCTCCAGAAGGGGCCATGAGTACTTT
 TTCATTAGGTGCAGGAGGCTGACACAGTAGAGGCAGCCAGAACCTCACCGTCCCAGGAGGACTGAGGTCCACA
 GACCTGCCTGGGCTCAAAGCAGCCACTCATTATACCATCACCATCCGCGGGGTCAGTCAAGGACTTCAGCACAAAC
 CCTCTCTCTGTTGAAGTCTTGACAGAGGAGGTTCCAGATATGGGAAACCTCACAGTGACCGAGGTTAGCTGGGAT
 GCTCTCAGACTGAACTGGACCACGCCAGATGGAACCTATGACCAGTTTACTATTAGGTCCAGGAGGCTGACCAG
 GTGGAAGAGGCTCACAATCTCACGGTTCCTGGCAGCCTGCGTTTCATGGAATCCCAGGCCTCAGGGCTGGCACT
 CCTTACACAGTCAACCTGCACGGCGAGGTGAGGGGCCACAGCACTCGACCCCTTGTGTAGAGGTGCTCACAGAG
 GATCTCCACAGCTGGGAGATTTAGCCGTGTCTGAGGTTGGCTGGGATGGCCTCAGACTCAACTGGACCGCAGCT
 GACAATGCCTATGAGCACTTTGTCAATTAGGTGCAGGAGGTCAACAAAGTGGAGGCAGCCAGAACCTCACGTTG
 CCTGGCAGCCTCAGGGCTGTGGACATCCCGGGCCTCGAGGCTGCCACGCCTTATAGAGTCTCCATCTATGGGGTG
 ATCCGGGGCTATAGAACCAGTACTCTCTGCTGAGGCCTCCACAGCCAAAGAACCTGAAATTGGAACCTTAAAT
 GTTTCTGACATAACTCCCGAGAGCTTCAATCTCTCCTGGATGGCTACCGATGGGATCTTCGAGACCTTTACCATT
 GAAATTATTGATTCCAATAGGTTGCTGGAGACTGTGGAATATAATATCTCTGGTGTGAACGAACTGCCATATC
 TCAGGGCTACCCCTAGTACTGATTTTATTGTCTACCTCTCTGGACTTGCTCCCAGCATCCGGACCAAAACCATC
 AGTGCCACAGCCACGACAGAGGCCCTGCCCCTTCTGGAACCTAACCATTTCCGACATTAATCCCTACGGGTTT
 ACAGTTTCTGATGGCATCGGAGAATGCCTTTGACAGCTTTCTAGTAACGGTGGTGGATTCTGGGAAGCTGCTG
 GACCCCCAGGAATTCACACTTTTCAAGAACCCAGAGGAAGCTGGAGCTTAGAGGCCTCATAACTGGCATTGGCTAT
 GAGGTTATGGTCTCTGGCTTCACCCAAGGGCATCAAACCAAGCCCTTGAGGGCTGAGATTGTTACAGAAGCCGAA
 CCGGAAGTTGACAACCTTCTGGTTTTAGATGCCACCCAGACGGTTTTCCGTCTGTCTGGACAGCTGATGAAGGG
 GTCTTCGACAATTTTGTCTCAAATCAGAGATACAAAAAGCAGTCTGAGCCACTGGAAATAACCCCTACTTGCC
 CCCGAACGTACCAGGGACATAACAGGTCTCAGAGAGGCTACTGAATACGAAATTGAACCTCTATGGAATAAGCAAA
 GGAAGGCGATCCCAGACAGTCACTGCTATAGCAACAACAGCCATGGGCTCCCCAAAGGAAGTCATTTTCTCAGAC
 ATCACTGAAAATTCGGCTACTGTGCTGAGGAGGACCCACAGCCCAAGTGGAGAGCTTCCGGATTACCTATGTG
 CCCATTACAGGAGGTACACCTCCATGGTAACCTGTGGACGGAACCAAGACTCAGACCAGGCTGGTGAACTCATA
 CCTGGCGTGGAGTACCTTGTGAGCATCATCGCCATGAAGGGCTTTGAGGAAAGTGAACCTGTCTCAGGGTCATTC
 ACCACAGCTCTGGATGGCCCATCTGGCCTGGTGACAGCCAACATCACTGACTCAGAAGCCTTGCCAGGTGGCAG
 CCAGCCATTGCCACTGTGGACAGTTATGTCACTCTCTACACAGGCGAGAAAGTGCCAGAAATTACACGCACGGTG
 TCCGGGAACACAGTGGAGTATGCTCTGACCGACCTCGAGCCTGCCACGGAATACACACTGAGAATCTTTGCAGAG
 AAAGGGCCCCAGAAGAGCTCAACCATCACTGCCAAGTTCACAACAGACCTCGATTCTCCAAGAGACTTGACTGCT
 ACTGAGGTTCACTCGGAACTGCCCTCCTTACCTGGCGACCCCCCGGCATCAGTCACCGGTTACCTGCTGGTC
 TATGAATCAGTGGATGGCACAGTCAAGGAAGTCAATTGTGGGTCCAGATACCACCTCCTACAGCCTGGCAGACCTG
 AGCCCATCCACCCACTACACAGCCAAGATCCAGGCACTCAATGGGCCCTGAGGAGCAATATGATCCAGACCATC
 TTCACCACAATTGGACTCCTGTACCCCTTCCCCAAGGACTGCTCCCAAGCAATGCTGAATGGAGACACGACCTCT
 GGCTCTACACCATTTATCTGAATGGTGATAAGGCTGAGGCGCTGGAAGTCTTCTGTGACATGACCTCTGATGGG
 GGTGGATGGATTGTGTTCTTGAGACGCAAAAACGGACGCGAGAACTTCTACCAAACTGGAAGGCATATGCTGCT
 GGATTTGGGGACCGCAGAGAAGAATTCTGGCTTGGGCTGGACAACCTGAACAAAATCAGAGCCAGGGGCAGTAC
 GAGCTCCGGGTGGACCTGCGGGACCATGGGGAGACAGCCTTTGTGTCTATGACAAGTTCAGCGTGGGAGATGCC
 AAGACTCGCTACAAGCTGAAGGTGGAGGGGTACAGTGGGACAGCAGGTGACTCCATGGCCTACCACAATGGCAGA
 TCCTTCTCCACCTTTGACAAGGACACAGATTAGCCATACCAACTGTGCTCTGTCTACAAAGGGGCTTTCTGG
 TACAGGAAGTGTACCGTGTCAACCTGATGGGGAGATATGGGGACAATAACCAAGTCAAGGCGTTAACTGGTTT
 CACTGGAAGGGCCAGAACACTCAATCCAGTTTGTGATGAGTGAAGCTGAGACCAAGCAACTTCAGAAATCTTGAA
 GGCAGGCGCAACGGGCATAAATTCCAGGGACCATTGGGTGAGAGAGGAATAAGGCCAGGCGAGGAAGGATT
 TTACCAAGCATCAATACAACAGCCCAACCATCGGTCCACACCTGGGCATTTGGTGAGAGTCAAAGCTGACCAT
 GGATCCCTGGGGCCAACGGCAACAGCATGGGCCTCACCTCCTCTGTGATTTCTTTCTTTGCACCAAGACATCAG
 TCTCCAACATGTTTCTGTTTTGTTGTTTGATTAGCAAAAATCTCCAGTGACAACATCGCAATAGTTTTTACT

WO 2004/030615

PCT/US2003/028547

2985/6881
FIGURE 2755C

TCTCTTAGGTGGCTCTGGGAATGGGAGAGGGGTAGGATGTACAGGGGTAGTTTGTTTTAGAACCCAGCCGTATTTT
ACATGAAGCTGTATAATTAATTGTCATTATTTTTGTTAGCAAAGATTAAATGTGTCATTGGAAGCCATCCCTTTT
TTTACATTTTATACAACAGAAACCAGAAAAAGCAATACTGTTTCCATTTTAAGGATATGATTAAATATTATTAATAT
AATAATGATGATGATGATGATGAAAACTAAGGATTTTTCAAGAGATCTTTCTTTCCAAAACATTTCTGGACAGTA
CCTGATTGTATTTTTTTTTTAAATAAAAAGCACAAAGTACTTTTG

WO 2004/030615

PCT/US2003/028547

2986/6881
FIGURE 2756

TTCAGATGTATGTTTATGTTTCTGACCTTGCGCTACCCCAAGTGCAGGCTCCAAACAGGCATGCGAGGTGCCITTG
GAAAGCCCCAGGGCACTGTGACCAGGGTTACATTGGCCAAGTTATCATGTCCATCCACACCAAGCTGCAGAACA
AGGAGCATGTAATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCCACCAGAAGATCCGCATCTCAAAGA
AGTGGGGCTTCACCAAGTTCAATGTTGATGAATTTGAAGACATGGTGGCTGAGAAGCAGCTCATCCCTGATGGCT
GTGGGGTCAAGTACATCCCCAGTCGTGGCCCTCTGGACAAGTGGCGGGCCCTGCACTCATGAGGGCTTCCACTGT
GCTGCCCCCTCTTAATACTCACCAATAAATTCTACTTCCTGTCC

WO 2004/030615

PCT/US2003/028547

2987/6881
FIGURE 2757

TCCCTTCAGCCGCCATCATGATTATCTACCAGGACCTCATCAGTCACAATGAGATGTTCTCCGACATCTAGAAGA
TCTGGGAGATTGTGGACGGGCTGTGCTGGGAGGTGGTGGGGAAAATGGTCAGTAGGACAGAAGGTAACATTGATG
ACTCGCTCATTGGTGGAAATGTCTCCGCTGAAGGCCCGAGGGTGAAGGTACCGAAAGCACAGTAATCACTGCTG
TCGATGTTGTTCATGAACCATCACCTGCAGGAAACAAGTTTCACAAAAGAAGCCCACAAGAAGTACATCAAAGATT
ACATGAAATCAATCAAAGGCAAACTTGAAGAACTGAGACCAGAAAGAGTAAAACCTTTTATGACAGGGGCTGCAG
AACAAATCAAGCACATCCTTGCTAATTTCAAAAACCTACCATTCTTTATTGGTGAAAACATGAATCCAGATGGCA
TGGTTGCTCTACTGGACTACGGTGAGGATGGTGTGACCCCATATATGATTTTCTTTAGGGATGGTTTAGAAACGG
AAAAATGTTAACAAATTTGGCAATTAGTTTGGATCTATTACCTGTCATCATAACTCGCTTCTAATTGTCATCCAC
ACAACACCAGGACCTAAGACAAATGGGACTAATATCATCTTGAGCTCTTCATTTATTTTACCATAATTTATTGCG
GAGTGGAGGCATTGTTTTTAAGAAAAACATGTCATGTAGGTTGTCTAAAAATAAAATGCATTTTAACTCATTGGA
GAGAATACCTTTTCGTTTAATGCATATTTAACTAAATTCATCCTGTTGTGTTCCCTGGAGAAGCTACAGCCTGGT
CATAAGCTACTACTAGAAAGAGTAAGACTCATCAATTAACCTTCTACAGTGGAAGTACTTCTGGGACTGGAATAT
ACAAAAAAAATCAAAGGTTTTGATTGTGTGTTGCAATAAAGGGAAAGACCATGTTTCATAGCAGTGCCAACATCTG
AAGTGGAGCTTTACGCATTTTCATCACCTACAATGGAATTAGTTAACTGGAAGAGATTACCAAGAGAATAAAAAAGA
GACGAATTCAGCTGGAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2988/6881
FIGURE 2758

MVSRTEGNIDDSLIGGNVSAEGPEGEGTESTVITAVDVVMNHHLQETSFTKEAHKKYIKDYMKSIGKLEELRPE
RVKPFMTGAAEQIKHILANFKNYHFFIGENMNPDGMVALLDYGEDGVTPYMIFFRDGLETEKC

WO 2004/030615

PCT/US2003/028547

2989/6881
FIGURE 2759A

AGGTTGAAGAACTTAACTCTGAAATTGAAAAGCTCAGTGCTGCCTTTTGCTAAAGCCAGAGAGGCCCTACAGAAAG
CACAGACCCAGGAATTTTCAGGGGTCTGAAGACTATGAGACTGCTCTATCAGGAAAGGAAGCCCTTTTCGGCTGCGC
TGCGCTCACAAAACCTCACCAAGAGTACAGAGAACCACAGACTGCGTAGAAGCATTAAAGAAGATCACCCAGGAGC
TGAGTGACTTGAGCAGGAGAGGGAGAGACTGGAGAAGGACCTGGAGGAAGCCCATCGAGAGAAGAGCAAAGGAG
ACTGCACCATCCGTGATCTTAGAAATGAAGTTGAAAAATTACGCAATGAAGTGAATGAAAGAGAGAAAGCAATGG
AAAATCGTTACAAGAGTCTTCTGAGTGAAAGCAATAAAAAATTGCACAATCAAGAGCAAGTGATCAAACATCTAA
CAGAAAGTACCAATCAGAAGGACGTGTTGCTTCAGAAATTCAATGAAAAAGATTTGGAAGTAATACAGCAGAACT
GCTATTTAATGGCTGCAGAGGATCTTGAGCTCAGGAGTGAAGGCTTAATAACAGAAAAGTGCTCTTCTCAACAGC
CACCAGGCAGCAAAAACCATCTTCTCTAAGGAAAAGAAACAATCATCAGACTATGAAGAGCTGATTGAGGTCTTAA
AGAAAAGAGCAGGACATCTATACCCATCTGGTCAAATCTCTGCAGGAATCAGACAGTATCAACAACCTGCAGGCTG
AGTTAAACAAGATTTTTCGCCCTGCGGAAGCAACTGGAGCAGGATGTGCTTTTCATATCAGAATTTGCGGAAGACCT
TGGAGGAGCAGATCAGCGAAATTCGGAGGCGGGAAGAAGAATCATTTTCACTTTATAGTGATCAAACATCTTATC
TAAGTATTTGCCTTGAAGAAAACAATCGGTTTCAAGTGGAACATTTTCTCAAGAAGAACTTAAGAAAAAGGTCA
GTGACCTTATACAGCTAGTGAAGGAGCTGTATACAGACAACCAGCACCTGAAGAAAACCATTTTTGATCTCTCCT
GCATGGGTTTCCAGGGAAATGGGTTTCCAGATAGACTTGCGTCTACAGAACAAACAGAGCTTCTGGCTAGCAAGG
AGGACGAGGACACGATCAAAATTGGGGAGGATGACGAGATTAATTTTCTGAGTGACCAGCATTTGCAGCAGAGTA
ATGAGATTATGAAAGACCTTTCCAAAGGAGGCTGCAAAAATGGATACTTAAGGCACACGGAGTCTAAGATTTTCAG
ATTGTGATGGGGCCCACGCACCTGGCTGCCTAGAAGAAGGTGCATTATATAAACCTGCTTGCCCCCTTTGTTCAATG
AGAAGGCCACATTATTACTGGAATCCAGGCCAGACCTTCTGAAAGTGGTACGGGAAGTCTTCTGGGACAACATAT
TCTTGACAGAGCAGGAAGTTTCTGGAGAACACCTTGATGGTAAAACTGAGAAGACACCTAAGCAAAAAGGTGAAC
TTGTACATTTTGTCCAAACCAACTCATTTTCCAAGCCACATGATGAAGTGAAGTTGTCTTGTGAGGCCCAGCTAG
TAAAGGCAGGCGAAGTGCCCAAGGTAGGACTGAAAGATGCCTCAGTGACAGCTGTGGCCACGGAGGGCGACCTGC
TGAGATTCAAGCATGAAGCAACAAGAGAGGCTTGGAAGAGAAAACCGATCAACACTGCACTCAGCGCAGAGCATC
GGCCAGAGAACCTGCACGGGGTGCCCTGGGTGGCAGGCTGCCCTCCTTTCCCTCCCTGGTATTACCAACAGAGAGG
CTAAGAAGTCCCGCTTGCCAATCCTAATAAAACCATCCCCGGTCATTAGGAAATATGTATCGTCTCCCTGCCACCC
AGGAGGTGGTGACGCAGCTGCAGAGCCAGATCTTGAGCTGCAGGGGGAGCTGAAGGAGTTTAAAACCTTGTAATA
AGCAACTTCACCAAAAGTTAATTCTGGCTGAAGCAGTGATGGAGGGGAGGCCAACGCCCGACAAAACGTTGCTGA
ATGCTCAGCCCCCTGTGGGAGCAGCCTACCAGGACAGCCAGGAGAGCAGAAAGGAATTAACACCATCTTCTG
TCTGGAGAGACAAGGAAATGGACAGTGATCAGCAAAGAGCTACGAGATTGACTCTGAGATTTGCCACCTGATG
ACCTTGCCAGCTTGCCATCATGCAAAGAAAATCCTGAAGATGTTCTGAGCCCAACTTCAGTAGCTACTTACCTGA
GTTCCAAGAGTCAGCCTTCTGCTAAAGTCAGTGTGATGGGGACTGATCAGTCAGAGAGCATTAAATACCTCAAATG
AGACAGAATACTTAAAACAGAAAATCCATGACTTGGAACCTGAGCTGGAAGGCTACCAGAATTTTCATATTTTCAGC
TTCAAAGCACTCCAGTGCACTGAGGCCATAATTACAGTTTTGTGTGGGACAGAAGGGGCCAGGATGGCTTGA
GCAAGCCCAAGAATGGTTCTGATGGGGAAGAAATGACCTTTTCAAGTTTGACCAAGTGCGATACGTGAAACACG
TGAAAATCCTCGGTCCGCTGGCCCCAGAGATGATTGACAGCAGGGTGCTGGAGAACCTCAAACAGCAGCTGGAGG
AACAGGAATACAAGCTGCAGAAGGAGCAGAAATTTGAACATGCAACTTTTCAGTGAGATCCATAATCTGCAGAATA
AGTTCAGAGATCTCTCACCTCCCAGATACGATTCAATAGTTTCAGTCCCAAGCCAGGGAGCTCTCCCTTCAACGGC
AGCAGATTAAGGATGGCCATGGCATCTGTGTCTCTCCCGTCAACACATGAACACCATGAATCAATGTGCTGAGC
AGTTGCTGCAGGCCAGTGATGTGGATTACTGTGTGGCCGAGGGTTTCCAGGAACAGCTGAATCAATGTGCTGAGC
TGCTGGAGAAATTGGAAAAGCTATTTCTCAACGGAAAATCAGTTGGAGTGGAAATGAACACCCAGAATGAAGTGA
TGGAGAGGATTGAGGAAGACAACCTAACCTACCAACATCTTCTGCCTGAATCTCCTGAGCCTTCAGCCTCTCATG
CGCTCTCTGATTATGAAACATCTGAAAAGTCCTTCTTCTCAGAGACCAGAAGCAAGATAATGAGACAGAGAAGA
CTTCAGTTATGGTGAACAGTTTTTCTCAAGACTTACTTAATGGAACACATACAGGAAATTCGAACTTTGAGAAAAGC
GTTTAGAAGAATCTATTAAAACAAATGAGAAGCTACGGAACAGTTGGAACGGCAAGGATCTGAATTTGTTCAAG
GTTCTACAAGCATTTTTGCTTCTGGTTTCAGAGCTTCATAGTTCTCTAACATCAGAAATTCATTTCTTGAGGAAGC
AGAACCAGGCCCTCAATGCAATGCTCATTAAAGGATCCAGAGATAAACAGAAGGAGAATGACAAAATTACGAGAGT
CCCTCTCCAGGAAGACCGTGAGCCTGGAGCACCTTCAGCGGGAGTATGCCAGCGTGAAGGAAGAAAATGAAAGGC
TGCAGAAAGAAGGCAGCGAGAAGGAGAGACACAACCAGCAGCTGATCCAGGAGGTCCGCTGCAGCGGCCAGGAGC

WO 2004/030615

PCT/US2003/028547

2990/6881
FIGURE 2759B

TGAGCAGGGTGCAGGAGGAGGTGAAGTTGAGGCAGCAGCTGCTCTCACAGAATGACAAGCTATTGCAGTCTCTCC
GAGTGGAGCTGAAGGCGTATGAGAAGCTGGATGAAGAGCACAGGAGACTGAGAGAGGCGTCGGGAGAAGGCTGGA
AGGGGCAGGATCCTTTTCAGGGACCTGCACAGCCTCCTGATGGAGATCCAGGCTCTGCGCTTGCAACTAGAAAGGA
GCATCGAAACCAGCAGCACTCTGCAGAGCAGGCTCAAGGAACAGCTGGCAAGGGGGGCAGAGAAGGCACAGGAAG
GAGCCCTCACTCTGGCTGTCCAAGCCGTGTCCATCCCTGAGGTGCCCTTCAGCCTGACAAACACGATGGTGACA
AATATCCCATGGAAGTGATAATTCATTTGATCTGTTTGATTCCCTCCCAGGCAGTGACACCAAATCAGTTTCAG
AGACTCCTCCACTCTCTGGGAATGACACGGACTCCCTCTCCTGCGACAGTGGCAGTTCGGCAACTAGCACTCCGT
GTGTGTCCCGCTGGTCACTGGCCACCACCTGTGGGCCAGCAAGAATGGCCGCCATGTCTGGGCCTGATTGAGG
ACTATGAGGCCCTGCTCAAACAGATCAGCCAGGGACAGAGGCTCCTTGCTGAAATGGACATTCAAACCCAAGAGG
CTCCCAGCTCCACAAGTCAAGAGCTGGGAACAAAGGTCCACACCCAGCACCCTGAGCAAGTTTGTGAGCAGTG
TGAGCACGGCCAAGCTGACCCTGGAAGAGGCCTACAGGCGGCTGAAGCTTCTCTGGAGAGTCTCACTCCCCGAGG
ATGGCCAGTGCCCCCTTCACTGTGAGCAGATTGGAGAAATGAAGGCAGAGGTCACCAAACACATAAAAAATTGT
TTGAACAAGAAAAGAAGTTGCAAAACACCATGAAGCTTTTGAGCTGAGCAAGCGCCAGGAAAAGTCATCTTTG
ATCAATTGGTCGTAACCCACAAAATCCTTCGGAAGGCCAGAGGAAACCTGGAGCTTAGGCCTGGGGGAGCCCATC
CAGGAACATGCAGTCCCAGCAGACCAGGCTCCTGAGAAGAACTTTCAGCCAATAAAGCTTGTGCTTCCCCCACC
AGCTCACGCTGTCTCTTTGTTCCAAGTGTGGTTCCCTATTTATTGAGGAAGAAAGAGCTGTCTGGCCAAAGGAAAT
CTATTTTTTCCCTTCATGTTTTCTCTCTGAAAGTTGGCTTGAGAGTTGTTGTCAGAAAGGTGCAGGTGCTCCACA
AACGGGTGGTAAAAAGGCCTCGAGCTCTTGGATGTTGTATTTTCAGATCAGGGGCAGGCACCGGAGTTGAGGCTGT
GCGCCTTGGTGGGCTTCAGCTCTTCCCCTGGATTGCTTAGTACTCAGCCAGTGCCACAGTTTGAAGATTCTCAT
TAAATGATTCATTTCAATTCACCTTG

WO 2004/030615

PCT/US2003/028547

2991/6881
FIGURE 2760

GGTGTGTGCGGAACATGGCGGAGCGCGGCAGGAAGCGGCCGTGCGGCCCGGGTGAACACGGCCAAAGGATTGAGT
GGCGAAAATGGAAGCAACAGAAGAAAGAGGAGAAAAAAAATGGAAGGATCTCAAGCTGATGAAAAAACTGGAGC
GGCAGCGGGGCACAGGAGGAACAGGCAAAGCGCCTGGAAGAGGAGGAGGCAGCGGCAGAGAAGGAGGACCGCGGGC
GGCCCTACACACTGAGCGTAGCCCTGCCGGGCTCCATCCTGGACAATGCTCAGTCGCCGGAGCTTCGCACCTACT
TGGCCGGTGCAGATTGCCAGAGCCTGTGCCATCTTCTGTGTGGATGAGATCGTGGTGTGTTGATGAGGAGGGCCAGG
ATGCCAAGACTGTGGAGGGGGAATTCACAGGAGTTGGGAAGAAGGGGCAGGCGTGCGTACAGCTGGCCCGGATCC
TGCAGTACCTGGAGTGTCCACAGTACCTGAGGAAGGCGTTCTTCCCAAGCACCAGGATCTACAGTTTGCAGGGC
TCCTGAACCCCTGGACAGCCCCACCACATGCGTCAGGATGAGGAATCCGAGTCCGAGAGGGCATCGTGGTGG
ATCGGCCCCACCCGGCCAGGCCACGGCTCCTTTGTCAACTGTGGCATGAAAAAGGAGGTGAAGATTGACAAGAACC
TGGAGCCCGGGCTTCGGGTGACTGTGCGACTGAACCAGCAGCAGCACCAGACTGCAAGACCTACCATGGCAAAG
TGGTATCATCGCAGGACCCTCGCACCAAAGCTGGTCTCTACTGGGGCTACACCGTCCGACTGGCTTCCTGCCTCA
GTGCTGTGTTTGCTGAGGCCCCCTTCCAAGATGGGTATGACCTGACCATCGGGACGTCAGAGCGCGGCTCAGATG
TGGCCTCTGCCCAGCTTCCCAACTTCAGGCATGCTCTTGTGGTGTTCGGGGGCTCCAGGGTCTGGAAGCTGGAG
CGGATGCTGACCCCAACCTGGAGGTGGCTGAACCCAGTGTCTCTTTGACCTGTACGTCAATACCTGTCCTGGCC
AGGGTAGCCGTACCATCCGCACGGAGGAAGCCATCCTCATCTCCCTGGCCGCCCTGCAGCCTGGCCTCATCCAGG
CGGGTGCCCGGCACACCTGAAAGTTCTAAGGGGCCGAGGACATCAGTGAAGCAGCAGTGAAACCAGGGGCTCTGC
AGGTCACTTGGGACGGACGCCACCAGACTTGTCTCC

WO 2004/030615

PCT/US2003/028547

2992/6881
FIGURE 2761

GGCACGAGGCTGGGTTCCGAGGCCCAAGCCCTTGGCAGTGTTTTGTGAGTGGAAGGGAGGTCACGCTATCGTCCGC
GGCCCCAGCAGCCCTGTGCCCTCGTTGGATCCCGCGACGCGGCTCCTTTAAGAGCCTCGCGGGTCGCCCCCGCT
AGGTGCTCCCCGGCCATGCGGGCGCTGCGGGCCGGCCTGACCCTGGCGTCGGGCGCGGGGCTGGGTGCGGTCGT
CGAGGGCTGGCGGCGGGCGGGAGGACGCGGGCGGGCGCTGGGACTGCTGGGCCGGCTGCCCCGTGCTGCCCGT
GGCGGCGGCAGCCGAGTTGCCCCCTGTGCCCGGGGACCCCGCGGGCCGGCGAGTTGGCCAAGTACGGGCTGCC
GGGGCTGGCGCAGCTCAAGAGCCGCGAGTCGTACGTGCTGTGCTACGACCCGCGCACCCGCGGCGCGCTCTGGGT
GGTGGAGCAGCTGCGACCCGAGCGTCTCCGCGGCGACGGCGACCGGCGCGAGTGCAGCTTCCGCGAGGACGACTC
GGTGCACGCGTACCACCGTGCCACCAACGCCGACTACCGCGGCAGTGGCTTCGACCGCGGTACCTGGCCGCGC
CGCCAACCACCGCTGGAGCCAGAAGGCCATGGACGACACGTTCTACCTGAGCAAAGTCGCGCCCCAGGTGCCCCA
CCTCAACCAGAATGCCTGGAACAACCTGGAGAAATATAGCCGCAGCTTGACCCGCAGCTACCAAACGTCTATGT
CTGCACAGGGCCACTCTTCCTGCCCAGGACAGAGGCTGATGGGAAATCCTACGTAAAGTACCAGGTCATCGGCAA
GAACCACGTGGCAGTGCCACACACTTCTTCAAGGTGCTGATCCTGGAGGCAGCAGGTGGGCAAATTGAGCTCCG
CACCTACGTGATGCCCAACGCACCTGTGGATGAGGCCATCCCACTGGAGCGCTTCCTGGTGCCATCGAGAGCAT
TGAGCGGGCTTCGGGGCTGCTCTTTGTGCCAAACATCCTGGCGCGGGCAGGCAGCCTCAAGGCCATCACGGCGGG
CAGTAAGTGAGGGTGGAGCCCAGTGAGACTGTGGGTGTGTGCAGGCCGGGGAGTATTAAAGGTGGTGATTTTGG
AAAAAAA

WO 2004/030615

PCT/US2003/028547

2993/6881
FIGURE 2762

MRALRAGLTLASGAGLGAVVEGWRRRRREDARAALGLLGRLPVLPVAAAAELPPVPGGPRGPGELAKYGLPGLAQL
KSRESYVLCYDPRTRGALWVVEQLRPERLRGDGDRRECDFREDDSVHAYHRATNADYRGSGFDRGHLAAAAANHRW
SQKAMDDTFYLSKVAPQVPHLNQNAWNNLEKYSRSLTRS YQNVYVCTGPLFLPRTEADGKS YVKYQVIGKNHVAV
PTHFFKVLILEAAGGQIELRTYVMPNAPVDEAIPLERFLVPIESIERASGLLFVFNILARAGSLKAITAGSK

WO 2004/030615

PCT/US2003/028547

2994/6881

FIGURE 2763

GGCACGAGGCCGGGCGGAGGCGATGGCGCCCTGGGCGCTCCTCAGCCCTGGGGTCTGGTGCGGACCGGGCACAC
CGTGCTGACCTGGGGAATCACGCTGGTGCTCTTCCTGCACGATACCGAGCTGCGGCAATGGGAGGAGCAGGGGGA
GCTGCTCCTGCCCCCTACCTTCCTGCTCCTGGTGCTGGGCTCCCTGCTGCTCTACCTCGCTGTGTCACTCATGGA
CCCTGGCTACGTGAATGTGCAGCCCCAGCCTCAGGAGGAGCTCAAAGAGGAGCAGACAGCCATGGTTCCCTCCAGC
CATCCCTCTTCGGCGCTGCAGATACTGCCTGGTGCTGCAGCCCTGAGGGCTCGGCACTGCCGTGAGTGCCGCCG
TTGCGTCCGCCGCTACGACCACCACTGCCCCTGGATGGAGAAGTGTGTGGGAGAGCGCAACCACCCACTCTTTGT
GGTCTACCTGGCGCTGCAGCTGGTGGTGCTTCTGTGGGGCCTGTACCTGGCATGGTCAGGCCTCCGGTTCTTCCA
GCCCTGGGGTCTGTGGTTGCGGTCCAGCGGGCTCCTGTTGCCCACCTTCCTGCTGCTGTCCCTCTTCTCGTTGGT
GGCCAGCCTGCTCCTCGTCTCGCACCTCTACCTGGTGGCCAGCAACACCACCACCTGGGAATTCATCTCCTCACA
CCGCATCGCCTATCTCCGCCAGCGCCCCAGCAACCCCTTCGACCGAGGCCTGACCCGCAACCTGGCCCACTTCTT
CTGTGGATGGCCCTCAGGGTCCTGGGAGACCCTCTGGGCTGAGGAGGAGGAAGAGGGCAGCAGCCCAGCTGTTTA
GGGTTGCTGGAGGCCGGGCTACCGTCTTGTGCCTGAAAACCACGGGGCCTGTCCCCAGCTGGGGTGAGCGCTCAG
AGGGCCTGGGGCCCTCACTCCTGCCACGCCTCCCAGACCCAGAACGGAGCTTCAAGTCAGACAGATCCCTGCC
TTGGTGGGCAGTTCTGCCTTCCAAGGAAGAAGGGGAAGAAAAGGACCTGTGGGTGGCTCAGGCCCAAGCAGACCC
CGGGCTCCACCCAGCCCCGCCAGGCTGCTGCCAGTGACACTTTTACAAATTTAATATAAAGCAAGTCCAGTC
TAAAAAGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

2995/6881
FIGURE 2764

MAPWALLSPGVLVRTGHTVLTWGITLVFLHDTLQWEEQGELLPLTFLLVLGSLLLYLAVSLMDPGYVNVQ
PQPQEELKEEQTAMVPPAIPLRRCRYCLVLQPLRARHCRECRRCVRRYDHHCPWMENCVGERNHPLFVVYLALQL
VLLWGLYLAWSGLRFFQPWGLWLRSSGLLFATFLLLSLFSLVASLLLVSHLYLVASNTTTFEFISSHRIAYLRQ
RPSNPFDRGLTRNLAHFFCGWPSGSWETLWAEEEEEEESPAV

WO 2004/030615

PCT/US2003/028547

2996/6881
FIGURE 2765

CATGTCGGCGCĈGGCGGCCAAAGTCAGTAAAAAGGAGCTCAACTCCAACCACGACGGGGCCGACGAGACCTCAGA
AAAAGAACAGCAAGAAGCGATTGAACACATTGATGAAGTACAAAATGAAATAGACAGACTTAATGAACAAGCCAG
TGAGGAGATTTTGAAAGTAGAACAGAAATATAACAACTCCGCCAACCATTTTTTCAGAAGAGGTCAGAAATTGAT
CGCCAAAATCCCAAATTTTTGGGTAAACAACATTTGTCAACCATCCACAAGTGTCTGCACTGCTTGGGGAGGAAGA
TGAAGAGGCACTGCATTATTTGACCAGAGTTGAAGTGACAGAATTTGAAGATATTAATCAGGTTACAGAATAGA
TTTTTATTTTGATGAAAATCCTTACTTTGAAAATAAAGTTCTCTCCAAAGAATTTTCATCTGAATGAGAGTGGTGA
TCCATCTTTCGAAGTCCACC GAAATCAAATGGAATCTGGAAAGGATTGACGAAACGTTTCGAGTCAAACGCAGAA
TAAAGCCAGCAGGAAGAGGCAGCATGAGGAACCAGAGAGCTTCTTTACCTGGTTTACTGACCATTCTGATGCAGG
TGCTGATGAGTTAGGAGAGGTCATCAAAGATGATATTTGGCCAAACCCATTACAGTACTACTTGGTTCCCGATAT
GGATGATGAAGAAGGAGAAGGAGAAGAAGATGATGATGATGATGAAGAGGAGGAAGGATTAGAAGATATTGACGA
AGAAGGGGATGAGGATGAAGGTGAAGAAGATGAAGATGATGATGAAGGGGAGGAAGGAGAGGAGGATGAAGGAGA
AGATGACTAAATAGAACACTGATGGATTCCAACCTTCCTTTTTTTAAATTTTCTCCAGTCCCTGGGAGCAAGTTG
CAGTCTTTTTTTTTTTTTTTTTTTTTTTTTTCCCTCTTGTGCTCAGTCGCCCTGTTCTTGAGGTCTCTTTCTCTAC
TCCATGGTTCTCAATTTATTTGGGGGAAATACCTTGAGCAGAATACAATGGGAAAAGAGTCTCTACCCCTTTCT
GTTCGAAGTTCAATTTTTATCCCTTCCTGTCTGAACAAAACCTGTATGGAATCAACACCACCGAGCTCTGTGGGAA
AAAAGAAAACCTGCTCCCTTCGCTCTGCTGGAAGCTGGAGGGTGCTAGGCCCTGTGTAGTAGTGATAGAAAT
CTAGCTTTTTTCTCTCTTCTCTGTATATTGGGCTCAGAGAGTACACTGTGTCTCTATGTGAATATGACAGTTA
GCATTTACCAACATGTATCTGTCTACTTTCTCTGTTTAAAAAAGAAAAAAAACTTAAAAAATGGGGTTATA
GAAGGTCAGCAAAGGGTGGGTTTGAGATGTTGGGTGGGTAAAGTGGGCATTTTGACAACATGGCTTCTCCTTTG
GCATGTTTAATTGTGATATTTGACAGACATCCTTGAGTTTAAGATGACACTTTTAAAAATAAATTCTCTCCTAAT
GATGACTTGAGCCCTGCCACTCAATGGGAGAATCAGCAGAACCTGTAGGATCTTATTTGGAATTGACATTCTCTA
TTGTAATTTTGTTCCGTGTTTATTTTTAAATTTTCTTTTTGTTTCACTGGAAAGGAAAGATGATGCTCAGTTTTAA
ACGTTAAAAGTGTACAAGTTGCTTTGTTACAATAAACTAAATGTGTACACAAAGGATTTGATGCTTTTCTCTCA
GCATAGGTATGCTTACTATGACCTTCCAAGTTTGACTTGTATAACATCACTGTCAAACCTTTGTCACCCTAACCTC
GTATTTTTTGATACGCACCTTTGAGGATGACCTCAGGGCTATGTGGATTGAGTAATGGGATTTGAATCAATGTAT
TAATATCTCCATAGCTGGGAAACGTGGGTTCAATTTGCCATTGGTTTCTGAAAGTATTCACATCATTTGGGATAC
CAGATAGCTCAATACTCTCTGAGTACATTGTGCCCTTGATTTTTATCTCCAAGTGGCAGTTTTTAAATTTGGCCT
TTTACCTGGATATAAATTAATTGTGCCTGCCACCACCATCCAACAGACCTGGTGCTCTAATGCCAAGTTATACAC
GGGACAGTTGCTGGCATGTCTTCATTGGCTATATAAAATGTGGCCAAGAAGATAGGCTCTCAGTAAGAAGTCTGA
TGGTGAGCAGTAACTGTCCCTGCTTTCTGGTATAAAGCTCTCAAATGTGACCATGTGAATCTGGGTGGGATAATG
GACTCAGCTCTGTCTGCTCAATGCCATTGTGCAGAGAAGCACCTAATGCATAAGCTTTTTAATGCTGTAAAATA
TAGTCGCTGAAATTAATGCCACTTTTTAGAGGTGAATTAATGGACAGTCTGGTGAACCTCAAAGCTTTTTGA
TGTATAAACTTGATAAATGGAACATTTCCATCAATAGGCAAAAGTGTAAACACCTATCTAGATGGATAGTATGT
AATTTCTGCACAGGTCTCTGTTTAGTAAATACATCACTGTATACCGATCAGGAATCTTGCTCCAATAAAGGAACA
TAAAGATTT

WO 2004/030615

PCT/US2003/028547

2997/6881
FIGURE 2766

GGCGGCGTAGGGGCGGAGGTGCGGCCTGAGTGCGTCCGCACGAGAGGGCGGAACCGTCTCCATGGCAACCCGCGC
GCAGCCGGGGCCACTCAGCCAGGCGGGAAGCGCTGGTGTGCGGCGCTGGCGACAGTCGGGGTTGCGAGCGGCCC
GGGGCCGGGGCGGCCAGGGCCGCTGCAGGACGAGACCCTGGGTGTGGCGTCCGTGCCCTCGCAGTGGAGGGCCGT
CCAGGGCATCCGCTGGGAGACGAAAAGTTGCCAGACGGCCAGCATTGCCACTGCCAGTGCATCCGCCCAGGCCAG
GAATCATGTGGACGCCAGGTGCAGACGGAGGCCCCCGTGCTGTGAGCGTGCAGCCCCCGTCCAGTATGACAT
ACCCAGGCTCGCAGCCTTTCTTCGGAGAGTGGAGGCCATGGTCATCCGAGAGCTGAACAAGAATTGGCAGAGCCA
CGCGTTTGATGGCTTCGAGGTGAAGTGGACCGAGCAGCAGCAGATGGTGTCTTGTCTGTATACCCCTGGGCTACCC
GCCAGCCCAAGCGCAGGGTCTGCATGTGACCAGCATCTCCTGGAACCTCACTGGCTCTGTGGTGGCCTGTGCCTA
CGGCCGGCTGGACCATGGGGACTGGAGCACGCTTAAGTCCTTCGTGTGTGCCTGGAACCTGGACCGGCGAGACCT
GCGTCCCCAGCAGCCGTGCGCCGTGGTGGAGGTCCCCAGCGCTGTCCTGTGTCTGGCCTTCCACCCACGCAGCC
CTCCACGTGCGCAGGAGGGCTGTACAGTGGTGGGTGTTGGTGTGGGACCTGAGCCGTCTTGAGGACCCGCTGCT
GTGGCGCACAGGCCTGACGGATGACACCCACACAGACCCTGTGTCCCAGGTGGTGTGGCTGCCCCGAGCCTGGGCA
CAGCCACCGCTTCAGGTGCTGAGTGTGGCCACCGACGGGAAGGTGCTACTCTGGCAGGGCATCGGGGTAGGCCA
GCTGCAGCTCACAGAGGGCTTCGCCCTGGTCATGCAGCAGCTGCCACGGAGCACCAGCTCAAGAAGCATCCCCG
CGGGGAGACCGAGGTGGGCGCCACGGCAGTGGCCTTCTCCAGCTTTGACCCTAGGCTGTTCAATTCTGGGCACGGA
AGGCGGCTTCCCGCTCAAGTGTTCCTGGCAGCTGGAGAGGCAGCCCTCACGCGGATGCCAGCTCCGTGCCCCCT
GCGGGCCCCAGCACAGTTTACCTTCTCCCCCACGGCGGTCCCATCTACTCTGTGAGCTGTTCCCCCTTCCACAG
GAATCTCTTCTGAGCGCTGGGACTGACGGGCATGTCCACCTGTACTCCATGCTGCAGGCCCCCTCCCTTGACTTC
GCTGCAGCTCTCCCTCAAGTATCTGTTTGCTGTGCGCTGGTCCCCAGTGCAGGCCCTTGGTTTTTGCAGCTGCCTC
TGGGAAAGGTGACGTGCAGCTGTTTGATCTCCAGAAAAGCTCCAGAAAACCCACAGTTTTGATCAAGCAAACCCA
GGATGAAAGCCCTGTCTACTGTCTGGAGTTCAACAGCCAGCAGACTCAGCTCTTGGCTGCGGGCGATGCCAGGG
CACAGTGAAGGTGTGGCAGCTGAGCACAGAGTTACGGAACAAGGGCCCCGGGAAGCTGAGGACCTGGACTGCCT
GGCAGCAGAGGTGGCGGCCTGAGGGGTCCCGGGAGGCGGGTGCAAGCCTTCGCTGTGCCGAGCCTTGTGTTTCTG
ACGCAAGCCAAATGAAGAAAAGCAAAGCTT

WO 2004/030615

PCT/US2003/028547

2998/6881
FIGURE 2767

ATGCTGCAGGAGTGGCTGGCGGCTGTGGGCGATGACTATGCTGCTGTGGTCTGGAGGCCTGAGGGCGAGCCCAGG
TTCTACCCAGATGAAGAGGGTCCCAAGCACTGGACCAAAGAAAGGCACCAGTTTCTGATGGAGCTGAAGCAGGAA
GCCCTCACCTTTGCCAGGAAGTGGGGGGCCGACTATATCCTGTTTGCAGACACAGACAACATTCTGACCAACAAT
CAGACTCTGCGGCTTCTCATGGGGCAGGGGCTTCCAGTGGTGGCCCCAATGCTGGACTCCCAGACCTACTACTCC
AACTTCTGGTGTGGGATCACCCCCAGGGCTACTACCGCCGCACAGCCGAGTACTTCCCCACCAAGAACCGCCAG
CGCCGGGGCTGCTTCCGTGTCCCCATGGTCCACTCCACCTTCCTTGCATCCCTGCGGGCTGAAGGGGCAGACCAG
CTTGCTTTTCTACCCGCCACATCCCAACTACACTTGGCCTTTCGACGACATCATCGTCTTCGCCTATGCCTGCCAG
GCTGCTGGGGTCTCCGTCCACGTGTGCAATGAGCACCGTTATGGGTACATGAATGTGCCGGTGAAATCCCACCAG
GGGCTGGAAGACGAGAGGGTCAACTTCATCCACCTGATCTTGGAAGCACTAGTGGACGGCCCCCGCATGCAGGCC
TCAGCTCATGTGACTCGGCCCTCTAAGAGGGCCAGCAAGATAGGGTTTGACGAGGTCTTTGTCATCAGCCTGGCT
CGCAGGCCTGACCGTCGGAACGCATGCTCGCCTCGCTCTGGGAGATGGAGATCTCTGGGAGGGTGGTGGACGCT
GTGGATGCTGGATGGCTCAACAGCAGTGCCATCAGGAACCTCGGCGTAGACCTGCTCCCGGGCTACCAGGACCCT
TACTCGGGCCGCACTCTGACCAAGGGCGAGGTGGGCTGCTTCCTCAGCCATTACTCCATCTGGGAAGAGGTGGTT
GCCAGGGGCTGGCCCGGGTCTGCTGTTTGGAGATGACGTGCGCTTTGAGAGCAACTTCAGGGGGCGGGCTGGAG
CGGCTGATGGAGGATGTGGAGGCAGAGAACTGTCTTGGGACCTGATCTACCTTGGACGGAACAGGTGAACCCCT
GAGAAGGAGACGGCCGTGGAGGGGCTGCCGGGCCTGGTGGTGGCTGGGTACTCCTACTGGACGCTGGCCTATGCC
CTGCGTCTGGCGGGTGCCCGCAAGCTGCTGGCCTCACAGCCTCTGCGCCGCATGCTGCCCCTGGACGAGTTCTTG
CCCATCATGTTGACCAGCACCCCAACGAGCAGTACAAGGCACACTTCTGGCCACGGGACCTGGTGGCCTTCTCC
GCCCAGCCCCTGCTCGCTGCCCTACCCACTATGCCGGGGACGCCGAGTGGCTCAGTGACACGGAGACATCCTCT
CCATGGGATGATGACAGCGGCCGCTCATCAGCTGGAGCGGCTCCCAAAAGACCCTGCGCAGCCCCCGCCTGGAC
CTGACTGGCAGCAGCGGGCACAGCCTCCAACCCAGCCCCGAGATGAGCTCTAG

WO 2004/030615

PCT/US2003/028547

2999/6881

FIGURE 2768

MLQEWLA AVGDDYAAVVWRPEGEPRFYPDEEGPKHWTKERHQFLMELKQEALTFARNWGADYILFADTDNILTNN
QTLRLLMGQGLPVVAPMLDSQTYYSNFWCGITPQGYRRTAEYFPTKNRQRRGCFRVPMVHSTFLASLRAEGADQ
LAFYPPHPNYTWPFDDIIVFAYACQAAGVSVHVCNEHRYGYMNPVKSHQGLEDERVNF IHLILEALVDGPRMQA
SAHVTRPSKRPSKIGFDEVFVISLARRPDRRERMLASLWEMEISGRVVDAGWLNSSAIRNLGVDLLPGYQDP
YSGRTLTKGEVGCFLSHYSIWEEVVARGLARVLVFEDDVRFESNFRGLERLMEDVEAEKLSWDLIYLGRKQVNP
EKETAVEGLPGLVVAGYSYWTLAYALRLAGARKLLASQPLRRMLPVDEF LPIMFDQHPNEQYKAHFWPRDLVAFS
AQPLLAAPTHYAGDAEWLSDTETSSPWDDDSGR LISWGSQKTLRSPRLDLTGSSGHS LQPQPRDEL

WO 2004/030615

PCT/US2003/028547

3000/6881

FIGURE 2769

GCGAGCTCGGCTTCCTCAACATGGCTGCGCCCTTGTCAGTGGAGGTGGAGTTCGGAGGTGGTGCGGAGCTCCTGT
TTGACGGTATTAAGAAACATCGAGTCACTTTGCCTGGACAGGAGGAACCCTGGGACATCCGGAACCTGCTCATCT
GGATCAAGAAGAATTTGCTAAAAGAGCGGCCAGAGTTGTTTCATCCAGGGAGACAGCGTGCGGCCAGGAATTCCTGG
TGCTGATTAACGATGCCGACTGGGAGCTACTGGGTGAGCTGGACTACCAGCTTCAGGACCAGGACAGCGTCCTCT
TCATCTCCACTCTGCACGGCGGCTGAGGGGCCCTTCTCTGGGCCTGGGCACCCCTTAGAGGGGAGAACGAAGCAATC
AGACATCCCCCTTGGGGCCCTGCTTCCAGGTCTCCCTGTCCCCCTTGCCCTGCCTTCTTCCCTGCTCTGTCCCCCTAAG
CTCCCTCCAGGCAGGGAAAAGAGGCCAGGTGCTAAAAATGAGCCCTTCTCAAGCACGTGAGCAGCGGAAGGCAGA
CAGGCGCCAGAGCCCAGCACTCCCTTTTCCAGCAGCTGTGGTGGGGGAGGGTTCCCCCTCCAGTTTGTCAAGAGTT
GAAGGAGGCTCTGTGGCCAGGTGACCTGGGTGCCCTCCACTCCTTGTACCTCAGTCTAAACATGGAGTGGCCGCT
GACAAGGCGCTCCAGCCCCAGAGCCAGCGTCTTCATGGGGAAGATGAATGGACCTGAGTAGCTGAAGGAAGGCCC
CTCCCTACCCAAAGACTGGAGGCTTCTCAGCCTCAATTTCCCTGTCTGTACAGCTGAGGGCTCTGCCTGTCCCC
ACTGCTATCAGTATGGAACCCAGCTGGGGTCCCCATTGAGTGCCGACTCCCCCACCAGCCAGCAGCTGCTCCT
CCAGCCACACCCCTCCTGCTCCCCCACCCTAGCCCTTGACCCTGGCTGGCCTGCCCCGCTCCACAGGCCACCA
GATGGGCTCCTGAGACCCTCCCCAGGCTGCTTACAGCTCATTCTGCTGGGGGTAGAGATGAGGGGAGGGAGTAAG
TTAAACCTTGGAAGTAGCAAGTAGAAGCCTGGGGGGATGCGTGTGCCTCAGTTTCCTCCTCCACAAGTGAATATAG
TGGCTGAAAAGTGGGGAGATACTTGATGGCGCGAATGTCCGTTTTCTCTCCCTTCCCACCTCCTGCAGGAAGCAG
GACGGGGCAGGCAGCACCTGGTAGGCACAGTGCTTTGCCCTCCTCCCCCTTCCCTTCTGGAAGTCTTGGGGCCTC
AGTGCTTGCAACAGCCGGCCTTGGGCAAATAAAAGACTAGGTTGTTTACT

WO 2004/030615

PCT/US2003/028547

3001/6881
FIGURE 2770

MAAPLSVEVEFGGGAELLFDGIKKHRVTLPGQEEPWDIRNLLIWIKKNLLKERPELFIQGDSVRPGILVLINDAD
WELLGELDYQLQDQDSVLFISTLHGG

WO 2004/030615

PCT/US2003/028547

3002/6881
FIGURE 2771

CAGCAGCAGCAGCAGCTCCAGCAACAGCAGCAGCAGCTCCAGCAGTTACAGCAGCAGCAGCTCCAGCAGCAGCAA
TTGCAGCAGCAGCAGTTACTGCAGCTCCAGCAGCTGCTCCAGCAGTCCCCACCACAGGCCCGTTGCCCATGGCT
GTCAGCCGGGGGCTCCCCCGCAGCAGCCACAGCAGCCGCTTCTGAATCTCCAGGGCACCAACTCAGCCTCCCTC
CTCAACGGCTCCATGCTGCAGAGAGCTTTGCTTTTACAGCAGTTGCAAGGACTGGACCAGTTTGCAATGCCACCA
GCCACGTATGACACTGCCGGTCTCACCATGCCCACAGCAAACTGGGTAACTCCGAGGCTATGGCATGGCATCC
CCAGGCCTCGCAGCCCCAGCCTCACACCCCCACAACCTGGCCACTCCAAATTTGCAACAGTTCTTTCCCCAGGCC
ACTCGCCAGTCTTTGCTGGGACCTCCTCCTGTTGGGGTCCCCATGAACCTTCCAGTTCAACCTTTCAGGACGG
AACCCCCAGAAAACAGGCCCGGACCTCCTCCTTACCACCCCCAATCGAAAGGATTCTTCTTCTCAGACAATGCCT
GTGGAAGACAAGTCAGACCCCCAGAGGGTCTGAGGAAGCCGAGAGCCCCGGATGGACACACCAGAAGACCA
GATTTACCGCCCTGCCAGAGGACATCGCCAAGGAAAAACGCACTCCAGCACCTGAGCCTGAGCCTTGTGAGGCG
TCCGAGCTGCCAGCAAAGAGATTGAGGAGCTCAGAAGAGCCACAGAGAAGGAACCTCCAGGGCAGTTACAGGTG
AAGGCCCAGCCGAGGCCCGGATGACAGTACCGAAACAGACACAGACACCAGACCTGCTGCCTGAGGCCCTGGAA
GCCCAAGTGCTGCCACGATTCCAGCCACGGGTCTGCAGGTCCAGGCCAGGTGCAGTCACAGACTCAGCCGCGG
ATACCATCCACAGACACCCAGGTGCAGCCAAAGCTGCAGAAGCAGGCGCAAACACAGACCTCTCCAGAGCACTTA
GTGCTGCAACAGAAGCAGGTGCAGCCACAGCTGCAGCAGGAGGCAGAGCCACAGAAGCAGGTGCAGCCACAGGTA
CAGCCACAGGCACATTCACAGGGCCCAAGGCAGGTGCAGCTGCAGCAGGAGGCAGAGCCGCTGAAGCAGGTGCAG
CCACAGGTGCAGCCCCAGGCACATTCACAGCCCCCAAGGCAGGTGCAGCTGCAGCTGCAGAAGCAGGTCCAGACA
CAGACATATCCACAGGTCCACACACAGGCACAGCCAAGCGTCCAGCCACAGGAGCATCCTCCAGCGCAGGTGTCA
GTACAGCCACCAGAGCAGACCATGAGCAGCCTCACACCCAGCCGAGGTGTCGTTGCTGGCTCCAGAGCAAACA
CCAGTTGTGGTTCATGTCTGCGGGCTGGAGATGCCACCTGATGCAGTAGAAGCTGGTGGAGGCATGGAAAAGACC
TTGCCAGAGCCTGTGGGCACCAAGTCAGCATGGAAGAGATTGAGAATGAGTCGGCCTGTGGCCTAGATGTGGGA
GAATGTGAAAACAGAGCGAGAGAGATGCCAGGGGTATGGGGCGCCGGGGGCTCCCTGAAGGTCACCATTCTGCAG
AGCAGTGACAGCCGGGCCTTTAGCACTGTACCCCTGACACCTGTCCCCCGCCCCAGTGACTCCGTCTCCTCCACC
CCTGCGGTACCAGCACTCCCTCTAAGCAGGCCCTCCAGTTCTTCTGCTACATCTGCAAGGCCAGCTGCTCCAGC
CAGCAGGAGTTCCAGGACCACATGTGCGGAGCCTCAGCACCAGCAGCGGCTAGGGGAGATCCAGCACATGAGCCAA
GCTGCTCCTGTCTCCTGCTGCCCCGTGCCCCGGGACGTCTTGAGACAGAGGATGAGGAGCCTCCACCAAGGCGC
TGGTGCAACACCTGCCAGCTCTACTACATGGGGGACCTGATCCAACACCGCAGGACACAGGACCACAAGATTGCC
AAACAATCCTTGCGACCCCTTCTGCACCGTTTGCAACCGCTACTTCAAAACCCCTCGCAAGTTTGTGGAGCACGTG
AAGTCCCAGGGGCATAAGGACAAAGCCAAGGAGCTGAAGTCGCTTGAGAAAGAAATTGCTGGCCAAGATGAGGAC
CACTTCATTACAGTGGACGCTGTGGGTGCTTCGAGGGTGATGAAGAAGAGGAAGAGGATGATGAGGATGAAGAA
GAGATCGAGGTTGAGGAGGAACCTCTGCAAGCAGGTGAGGTCCAGAGATATATCCAGAGAGGAGTGGAAGGGCTCG
GAGACCTACAGCCCCAATACTGCATATGGTGTGGACTTCTGGTGCCCGTGATGGGCTATATCTGCCGCATCTGC
CACAAGTTCTATCACAGCAACTCAGGGGCACAGCTCTCCCACTGCAAGTCCCTGGGCCACTTTGAGAACCTGCAG
AAATACAAGGCGGCCAAGAACCCAGCCCCACACCCGACCTGTGAGCCGCGGTGCGCAATCAACGCCCCGAAC
GCTTTGACAGCCCTGTTACCTCCAGCGGCGCCACCCCTCCAGCCCCAACACCCAGGACAAAACACCCAGCAAG
GTGACGGCTCGACCTCCAGCCCCCACTACCTCGGCGCTCAACCCGCTCAAAACCTGATAGAGGGACCTCCCT
GTCCCTGGCCTGCCTGGGTCCAGATCTGCTAATGCTTTTTAGGAGTCTGCCTGGAACTTTGACATGGTTTCATGT
TTTTACTCAAAATCCAATAAAACAAGGTAGTTTGGCTG

WO 2004/030615

PCT/US2003/028547

3003/6881

FIGURE 2772

GGCACGAGGGGCGGGCGTTTCGAACTTGGGCGCCGGGCACACGCCAGTCCCGAGAGCGCTGAGGGTTCCCTTAG
CGTCGCCCTCACCCCGGCCAACCCGCGGGGCGCCAGAGTCTTGGCCCTTTAAACGCCGCGCTGCCCTCGGCGTCT
TCGTTTCGCGCGCCCCGCCGCGGGCGCCGGCGGAGCGAACATGGACCCGGCTGCGCGGGTGGTGCGGGCGCTGTGG
CCTGGTGGGTGCGCCTTGGCCTGGAGGCTGGGAGGCCGCCCCAGCCGCTGCTACCCACGCAGAGCCGGGCTGGC
TTGCGGGGGCGGGCGGGCGCCCGAGCCCCGTGGCTGCAGCTCGTAAGGGGAGCCCGGGCTGCTGGGAGCTGCG
GCGCTGGCCCTGGGGGAGCCCTGGGGCTGTACCACACGGCGCGGTGGCACCTGCGCGCCCAGGACCTCCACGCA
GAGCGCTCAGCCGCGCAGCTCTCCCTGTCCAGCCGCTGCAGCTGACCCTGTACCAGTACAAGACGTGTCCCTTC
TGCAGCAAGGTCCGAGCCTTCTCGACTTCCATGCCCTGCCCTACCAGGTGGTGGAGGTGAACCCTGTGCGCAGG
GCTGAGATCAAGTTCTCCTCCTACAGAAAGGTGCCCATCCTGGTGGCCCAGGAAGGAGAAAGCTCGCAACAATA
AATGACTCCTCTGTTCATCATCAGCGCCCTCAAGACCTACCTGGTGTGGGGCAGCCCCTGGAAGAGATCATCACC
TACTACCCAGCCATGAAGGCTGTGAACGAGCAGGGCAAGGAGGTGACCGAGTTCGGCAATAAGTACTGGCTCATG
CTCAACGAGAAGGAGGCCAGCAAGTGTATGGTGGGAAGGAGGCCAGGACGGAGGAGATGAAGTGGCGGCAGTGG
GCGGACGACTGGCTGGTGCACCTGATCTCCCCAATGTGTACCGCACGCCACCAGGCTCTGGCGTCTTTGAC
TACATTGTCCGCGAGGGCAAGTTCGGAGCCGTGGAGGGTGCCGTGGCCAAGTACATGGGTGCAGCGGCCATGTAC
CTCATCAGCAAGCGACTCAAGAGCAGGCACCGCCTCCAGGACAACGTGCGCGAGGACCTCTATGAGGCTGCTGAC
AAGTGGGTGGCTGCTGTGGGCAAGGACCGGCCCTTCATGGGGGGCCAGAAGCCGAATCTCGCTGATTTGGCGGTG
TATGGCGTGCTGCGTGTGATGGAGGGGCTGGATGCATTGATGACCTGATGCAGCACACGCACATCCAGCCCTGG
TACCTGCGGGTGGAGAGGGCCATCACCGAGGCCTCCCCAGCGCACATGAATGTCCCCGCGCAGAGCAGAGGGAAGG
CAGCGGAAGACGCCAGCTGCCAGGGCCTGGGGCCACTGGGCCAGCGCCTGGCGATACTGGTTGGGGGCAGGATCA
TTCTGCCCCCTTGTCCACGCACCCCCACCAGCCCTCTCGCTTCTAACACAGGGCACCTGCTGGGGCTCAGGGATGT
TAGGGACGAGTTCCAGCCCTGCCACTGCCCTGGGGCGACCCCTCCCTGTCCCTGCCCTCCCTGCTCTGCCGCCCT
CTTCTGGACCCCTCAGTGGCTGTCCCATGGCTACATCCTGTGGGTGGGGGCCCTCGACAGGACAGCAGGACGGTT
TGTTTTTCAGTGAATCCCATCCCTGGGTTCCCTGGTTCCCACTCTTCCCAAGCCTCCCGGGACTGGGACATGTT
TGCAATAAAGGAAAGGTTTGTGGCGCCTGTCATGGCAGGCATCTCATGGAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3004/6881

FIGURE 2773

MDPAARVVRLWPGGCALAWRLGGRPQPLLPTQSRAGFAGAAGGPPVAAARKGSPRLLGAAALALGGALGLYHT
ARWHLRAQDLHAERSAAQLSLSSRLQLTLYQYKTCPFCSKVRAFLDFHALPYQVVEVNPVRRAEIKFSSYRKVPI
LVAQEGESSQQLNDSSVVISALKTYLVSGQPLEEIIITYYPAMKAVNEQGKEVTEFGNKYWLMLNEKEAQQVYGGK
EARTEEMKWRQWADDWLVLHLISPNVYRTPTEALASFDYIVREGKFGAVEGAVAKYMGAAAMYLI SKRLKSRHRLQ
DNVREDLYEAADKWVAAVGKDRPFMGGQKPNLADLAVYGVLRVMEGLDAFDDLMQHITHIQPWYLRVERAITEASP
AH

WO 2004/030615

PCT/US2003/028547

3005/6881
FIGURE 2774

CCCAGCCCTGGAGACAGCAGCCCCTAGACTACTGAGGGACAGCGACAGCATGAAGGCTCCGGGTCTGGCTCGTGCT
CATCATCCTGTGCTCCGTGGTCTTCTCTGCCGTCTACATCCTCCTGTGCTGCTGGGGCCGGCCTGCCCTCTGCCT
GGCCACCTGCCTGGACCACCACTTCCCCACAGGCTCCAGGCCCACTGTGCCGGGACCCCTGCACTTCAGTGGATA
TAGCAGTGTGCCAGATGGGAAGCCGCTGGTCCGCGAGCCCTGCCGCAGCTGTGCCGTGGTGTCCAGCTCCGGCCA
AATGCTGGGCTCAGGCCTGGGTGCTGAGATCGACAGTGCCGAGTGCGTGTTCGCGATGAACCAGGCGCCACCGT
GGGCTTTGAGGCGGATGTGGGCCAGCGCAGCACCCCTGCGTGTGCTCTCACACACAAGCGTGCCGCTGCTGCTGCG
CAACTATTCACACTACTTCCAGAAGGCCCCGAGACACGCTCTACATGGTGTGGGGCCAGGGCAGGCACATGGACCG
GGTGTCTCGGCGGCCGCACCTACCGCACGCTGCTGCAGCTCACCAGGATGTACCCCGGCCCTGCAGGTGTACACCTT
CACGGAGCGCATGATGGCCTACTGCGACCAGATCTTCCAGGACGAGACGGGCAAGAACCAGGAGGCAGTCGGGCTC
CTTCCTCAGCACCGGCTGGTTCACCATGATCCTCGCGCTGGAGCTGTGTGAGGAGATCGTGGTCTATGGGATGGT
CAGCGACAGCTACTGCAGGGAGAAGAGCCACCCCTCAGTGCCTTACCCTACTTTGAGAAGGGCCGGCTAGATGA
GTGTCAGATGTACCTGGCACACGAGCAGGCGCCCCGAAGCGCCACCGCTTCATCACTGAGAAGGCGGTCTTCTC
CCGCTGGGCCAAGAAGAGGCCCATCGTGTTCGCCCATCCGTCTCGGAGGACTGAGTAGCTTCCGTGCTCCTGCCA
GTCGCCATGCCGTTGCGAGGCCTCCGGGATGTCCCATCCCAAGCCATCACACTCCACAAAAACATTTAATTTATG
GATCCTGCCTCCTGCCACGTGCTGGGTGGACCTAAGGTTCCCTTCCACTCCCTGAGTAATTCACGGCATTGGGG
GCTCACCCACCTCCAGGTCTGTCAAGTGGCCTTTGTCCC

WO 2004/030615

PCT/US2003/028547

3006/6881
FIGURE 2775

GCGCGGCATAACGACCCAGGTCGCGGCGCGGGCGGGGCTTGAGCGCGTGCCGGTGCCGCAGGAGCCGAGCATGGA
GTACCAGGATGCCGTGCGCATGCTCAATACCCTGCAGACCAATGCCGGCTACCTGGAGCAGGTGAAGCGCCAGCG
GGGTGACCCCTCAGACACAGTTGGAAGCCATGGAAGTGTACCTGGCACGGAGTGGGCTGCAGGTGGAGGACTTGGA
CCGGCTGAACATCATCCACGTCACCTGGGACGAAGGGGAAGGGCTCCACCTGTGCCTTCACGGAATGTATCCTCCG
AAGCTATGGCCTGAAGACGGGATTCTTTAGCTCTCCCCACCTGGTGCAGGTTCTGGGAGCGGATCCGCATCAATGG
GCAGCCCATCAGTCCTGAGCTCTTCACCAAGTACTTCTGGCGCCTCTACCACCGGCTGGAGGAGACCAAGGATGG
CAGCTGTGTCTCCATGCCCCCTACTTCCGCTTCTTGACACTCATGGCCTTCCACGTCTTCCTCCAAGAGAAGGT
GGACCTGGCAGTGGTGGAGGTGGGCATTGGCGGGGCTTATGACTGCACCAACATCATCAGGAAGCCTGTGGTGTG
CGGAGTCTCCTCTCTTGGCATCGACCACACCAGCCTCCTGGGGGATACGGTGGAGAAGATCGCATGGCAGAAAGG
GGGCATCTTTAAGCAAGGTGTCCCTGCCTTCACTGTGCTCCAACCTGAAGGTCCCTGGCAGTGTCTGAGGGACCG
AGCCCAGCAGATCTCATGTCTCTATACCTGTGTCCGATGCTGGAGGCCCTCGAGGAAGGGGGGCGCGCTGAC
CCTGGGCCTGGAGGGGGAGCACCAGCGGTCCAACGCCGCCTTGGCCTTGACGTGGCCCACTGTCTGGCTGCAGCG
GCAGGACCGCCATGGTGTCTGGGGAGCCAAAGGCATCCAGGCCAGGGCTCCTGTGGCAGTGTCCCTGGCACCTGT
GTTCCAGCCCACATCCCACATGCGGCTCGGGCTTCGGAACACGGAGTGGCCGGGCGGACGCAGGTGTGCGGCG
CGGGCCCCCTCACCTGGTACCTGGACGGTGCACACCGCCAGCAGCGCGCAGGCCTGCGTGCCTGGTTCGCGCA
GGCGCTGCAGGGCCGCGAGAGGCCGAGCGGTGGCCCCGAGGTTTCGAGTCTTGCTCTTCAATGCTACCGGGGACCG
GGACCCGGCGGCCCTGCTGAAGCTGCTGCAGCCCTGCCAGTTTGACTATGCCGTCTTCTGCCCTAACCTGACAGA
GGTGTCTATCCACAGGCAACGCAGACCAACAGAACTTCACAGTGACACTGGACCAGGTCTGCTCCGCTGCCTGGA
ACACCAGCAGCACTGGAACCACTGGACGAAGAGCAGGCCAGCCCGGACCTCTGGAGTGCCCCCAGCCCAGAGCC
CGGTGGGTCCGCATCCCTGCTTCTGGCGCCCCACCCACCCACACCTGCAGTGCCAGTCCCTCGTCTTCAGCTG
CATTTACATGCCTTGCAATGGATCAGCCAAGGCCGAGACCCCATCTTCCAGCCACCTAGTCCCCCAAAGGGCCT
CCTCACCCACCCTGTGGCTCACAGTGGGGCCAGCATACTCCGTGAGGCTGCTGCCATCCATGTGCTAGTCACTGG
CAGCCTGCACCTGGTGGGTGGTGTCTTGAAGCTGCTGGAGCCCGCACTGTCCAGTAGCCAAGGCCCGGGGTTGG
AGGTGGGAGCTTCCACACCTGCCTGCGTTCTCCCCATGAACCTTACATACTAGGTGCCTTTTGTTTTTTGGCTTTC
CTGGTTCTGTCTAGACTGGCCTAGGGGCCAGGGCTTTGGGATGGGAGGCCGGGAGAGGATGTCTTTTTTAAGGCT
CTGTGCCTTGGTCTCTCCTTCTTGGCTGAGATAGCAGAGGGGCTCCCCGGGTCTCTCACTGTTGCAGTGGCC
TGGCCGTTACAGCTGTCTCCCCAACACCCCGCCTGCCTCCTGGCTCAGGCCAGCTTATTGTGTGCGCTGCCTG
GCCAGGCCCTGGGTCTTGCCATGTGCTGGGTGGTAGATTTCCTCCTCCAGTGCCTTCTGGGAAGGGAGAGGGCC
TCTGCCTGGGACACTGCGGGACAGAGGGTGGCTGGAGTGAATTAAAGCCTTTGTTTTT

WO 2004/030615

PCT/US2003/028547

3007/6881
FIGURE 2776

MSRARSHLRAALFLAAASARGITTQVAARRGLSAWPVPQEPSMEYQDAVRMLNTLQTNAGYLEQVKRQRGDPQTQ
LEAMELYLARSLQVEDLDRLNI IHVTGKKGKSTCAFTECILRSYGLKTGFFRFGSGSASMGSPSVLSSSPSTS
GASTTGWRRPRMAAVSPCPPTSAS

WO 2004/030615

PCT/US2003/028547

3008/6881
FIGURE 2777

TCACCCGGATGGCGGCTGCGACGCGCGGCTGCCGGCCCTGGGGCTCGCTCCTCGGGCTGCTCGGGCTGGTCTCGG
CCGCGGCCGCCGCTGGGACCTGGCTTCCCTGCGCTGCACCTTGGGCGCCTTTTCGGAATGCGACTTCCGGCCCCG
ACTTGCCGGGTCTGGAGTGTGACCTGGCTCAGCACCTGGCCGGCCAGCATCTGGCCAAGGCGCTGGTGGTGAAGG
CGCTGAAGGCCTTTGTGCGGGACCCAGCCCCACCAAGCCGCTGGTCCTCTCCCTGCACGGCTGGACCGGCACCG
GCAAAATCCTATGTCAGCTCCCTGCTGGCGCACTACCTCTTCCAGGGCGGCCCTCCGCAGCCCCCGCTGCACCACT
TTTCTCCCGTCTCTCACTTCCCCACCCAGCCACATCGAGCGCTACAAGAAGGATCTGAAGAGCTGGGTCCAAG
GGAACCTCACTGCCTGTGGCGCTCCCTCTTCTCTTCGATGAGATGGACAAGATGCCCCCAGGCCTGATGGAAG
TCCTGCGGCCTTTCTGGGCTCCTCCTGGGTGGTATACGGGACCAATTACCGCAAAGCCATCTTCATCTTCATCA
GGTGGGGCCCGCTTTGCAGTGGGCACAGTGGGGGGGCCACTTCTCAGAGGTTAGCTCTACAGCCTTAGCCTGT
GCTCCCAGCAGAATCCAGTTCCCATGGGCTTAGCTGGGCTTTCCAGTGGCCTCCGCCACTCTCAGAGATGACA
TTGTCAATCCGCTGGTTGATTTCCCTTTGGACATTCTCAGCAAATCTGGGCTCAGTCTTTTTGATCGCCACTT
CTTTGTGGAAGCCCTGCCAGGTCAAGAAGTTTTCCCTCTTTTGTGGTGAGGAGGACACAGGCCTGGGAAAAATAG
GAACAGAGTTCTTGTCTTTAGTCCAGCTCTCAGAATCCTCGCTGTGTTTCTCAGGCAGCATGGCTCCGCCTC
TCTGAGCCTCTGTCTCTGCTTCTGAACAGCGGGGCCAATAATGATGCCCCGATGCCTTCCTGGAAGTTCAGTGAG
GGAAAGTCAGTTGAGGGACACAAAAGTGTTTTGTAACATATAAAGTACGTGGCATGTGTAGGTGAATTACAGGGG
CCATGGATGTGGACACCATGGAGGGGGAAGTGGAGCGTTTTTCAGTGGAGTTGGCTCCTCCCGCACTGAGCCATG
TTCTATGTGAGGTGGCAGCGGGGAAGCGAGGTCCAATCTGCCCTGCGCTAGTCTCATCTGAGTCTCAGCCT
GGGTCCCCCATGGTTTTAGCAACACGGGTGGCAAGCAGATCAACCAGGTGGCATTGGAGGCGTGGCGCAGCCGC
GGGACCGCGAGGAGATCCTCCTGCAGGAGCTGGAGCCGGTCATCTCCCGCGCGGTGCTGGACAACCCGCACCGTG
AGTCTGGCTCAGCAGCCCCCTCCCGGGCAGCTTCACCCACACCCAGGGGCCAGGCTCTCCCGGGTCTCATGCT
TTGCCCCTGACCCGGCAGTTCTGAGCCTGGCTTTGGCACTCCAGCTTTGTGACTTTGGGTGAGCCTTACAGCC
CCTGAGTCCTACACCCAGAAGGCGGCTGAGGGAACTGAGGCCAGCATTTTTCTCTCCTGCCCCCTGGGGGTTTGGGG
CCGGCTTCTCCCTCTTGTGAAGCACAAGTCCCTCCCCACCTACCCTTCCTGCAGATGGCTTCTCAAACCTCGG
GCATCATGGAAGAGCGCCTCCTAGACGCAGTGGTGCCCTTCCTCCCGCTCCAGCGGCACCACGTCCGGCACTGCG
TGCTCAACGAGCTGGCCAGCTGGGCCTGGAGCCAAGGGATGAGGTTGTCCAGGCTGTGCTGGACAGCACCACCT
TCTTCCCTGAAGACGAGCAGCTCTTCTCCTCCAACGGCTGCAAGACCGTGGCCTCCCGAATCGCTTCTTCTCT
GACTCTCTGAGTGGTGTCTCTCGGCCCCCTGATGGCCAGGCCATGCAGGAAAGGCCAGGGGCCCTGTGTACAGGA
ACCCAGAGCACCAAGTGAGATGAACGGAGTGTGGGCTAGGCCACGGGACAGATGGCCAGGAAGGGCCCTGGCCTC
TAAACTGGCTCGAGAGCATCTTGGCCCCGGCCACCTTCCCCAGGGAAACCCCTGGTCACCCAGAACCTCACTGA
GCCTTGACCTCCCCCTGCAGCCTGAGCCTTCTTACTGTGAATTATAACTCAGGGACTGTGGCTCGTGGCGGTGCT
CCCTCCTCAGTCTGCCACCCCTTGCCCTTGCCTCCTTGGTCGGGCACCATACCTCCTCCCTCCACCCACACCC
TGTGTCCATATCAAGCCAGGTGGAGCCTTCTCAGTTTCCAGAAATGGAGGGACTCAAGCTGCCACTTGGGCCTGG
TTTTAGATGTTTTTAATTTTGTAAAAGAAAACAAGTATAATAAATCAGCTGTGGGACCAG

WO 2004/030615

PCT/US2003/028547

3009/6881
FIGURE 2778A

GCGCCAGCGGGCTCCGCCTGAGCAGCGCGGGCAACAGCGGCGGCGTCCGGCCGATCGGGCCGCGACACCTCCTGG
 CCATGGGGGACGTGCTGTCCACGCACCTGGACGACGCCCGCGCCAGCACATCGCAGAAAAACCGGGAAGATCC
 TGACGGAGTTCTTCCAGTTCTATGAAGACCAGTATGGCGTGGCTCTCTTCAACAGCATGCGCCATGAGATTGAGG
 GCACGGGGCTGCCGAGGCCAGCTGCTCTGGCGCAAGGTGCCACTGGACGAGCGCATCGTCTTCTCGGGGAACC
 TCTTCCAGCACCAGGAGGACAGCAAGAAGTGAGAAACCGCTTCAGCCTCGTGCCCCACAACCTACGGGCTGGTGC
 TCTACGAAAAACAAAGCGGCCTATGAGCGGCAGGTCCCACCACGAGCCGTCATCAACAGTGCAGGCTACAAAATCC
 TCACGTCCGTGGACCAATACCTGGAGCTCATTGGCAACTCCTTACCAGGGACCACGGCAAAGTTCGGGCAGTGCCC
 CCATCCTCAAGTGCCCCACACAGTTCCCGCTCATCCTCTGGCATCCTTATGCGCGTCACTACTACTTCTGCATGA
 TGACAGAAGCCGAGCAGGACAAGTGGCAGGCTGTGCTGCAGGACTGCATCCGGCACTGCAACAATGGAATCCCTG
 AGGACTCCAAGGTAGAGGGCCCTGCGTTTACAGATGCCATCCGATGTACCGACAGTCCAAGGAGCTGTACGGCA
 CCTGGGAGATGCTGTGTGGGAACGAGGTGCAGATCCTGAGCAACCTGGTGATGGAGGAGCTGGGCCCTGAGCTGA
 AGGCAGAGCTCGGCCCCGCGCTGAAGGGGAAACCGCAGGAGCGGCAGCGGCAGTGGATCCAGATCTCGGACGCCG
 TGTACCACATGGTGTACGAGCAGGCCAAGGCGCGCTTCGAGGAGGTGCTGTCCAAGGTGCAGCAGGTGCAGCCGG
 CCATGCAGGCCGTCATCCGAAGTACATGGACCAAAATTATCACCTCCAAGGAGCACCTTGCCAGCAAGATCCGAG
 CCTTCATCTCCCAAGGCAGAGGTGTGCGTGCAGAACCATGTCCAGCCCTACATCCCATCCATCCTGGAGGCC
 TGATGGTCCCCACCAGCCAGGGCTTCACTGAGGTGCGAGATGTCTTCTTCAAGGAGGTACGGACATGAACCTGA
 ACGTCATCAACGAGGGCGGCATTGACAAGCTGGGCGAGTACATGGAGAAGCTGTCCCGGCTGGCGTACCACCCCC
 TGAAGATGCAGAGCTGCTATGAGAAGATGGAGTCGCTGCGACTGGACGGGCTGCAGCAGCGATTTGATGTGTCCA
 GCACGTCCGTGTTCAAGCAGCGAGCCCAGATCCACATGCGGGAGCAAATGGACAATGCCGTGTATACGTTTCGAGA
 CCCTCCTGCACCAGGAGCTGGGGAAGGGGCCCCACCAAGGAGGAGCTGTGCAAGTCCATCCAGCGGGTCTGGAGC
 GGGTGTGAAGAAATACGACTACGACAGCAGCTCTGTGCGGAAGAGGTTCTTCCGGGAGGGCGCTGCTGCAGATCA
 GCATCCCGTTCTGCTCAAGAAGCTGGCCCCCTACCTGCAAGTCCGAGCTGCCCGGTTCCAGGAGCTGATCTTCG
 AGGACTTTGCCAGGTTTATCCTGGTGGAAAAACAGTACGAGGAGGTGGTGTGTCAGACCGTTCATGAAGGACATCC
 TGCAGGCTGTGAAGGAGGCCGCGGTGCAGAGGAAGCACAACCTCTACCGGGACAGCATGGTCATGCACAACAGCG
 ACCCAAACCTGCACCTGCTGGCCGAGGGCGCCCCCATCGACTGGGGCGAGGAGTACAGCAACAGCGGCGGGGGCG
 GCAGCCCCAGCCCCAGCACCCCCGGAGTCAGCCACCCTCTCGGAAAAGCGACGGCGCGCCAAGCAGGTGGTCTCTG
 TGGTCCAGGATGAGGAGGTGGGGCTGCCCTTTGAGGCTAGCCCTGAGTCACCACCACCTGCGTCCCCGGACGGTG
 TCACTGAGATCCGAGGCCTGCTGGCCCCAAGGTCTGCGGCCTGAGAGCCCCCACCAGCCGGCCCCCTGCTCAACG
 GGGCCCCCGCTGGGGAGAGTCCCCAGCCTAAGGCCGCCCCCGAGGCCTCCTCGCCGCTGCTCACCCTCCAGC
 ATCTCCTGCTGGAAAGGCTGTGGACCTTGGGCCCCCAAGCCAGCGACCAGGAGACTGGAGAGCAGGTGTCCA
 GCCCCAGCAGCCACCCCCGCCCTCCACACCACCACCGAGGACAGTGCAGGGGTGCAGACTGAGTTCTAGGCCAGTG
 GGTCCCTGACTGCTGCACATGGCACAGGCCGTTCCCTTCCGGACCCAGGCAGGCTCAGCTCTGGGGAGGGCACCC
 TGGTCTGTGCTTGTGGGTGGAGGCGGGGCGAGGGCTGTGTGGCACCGCCAGGGAGCGGGCCACCTGAGTCACTT
 TATTGGGTTTCACTCAACACTTTCTTGTCTCCCTGTTTTCTCTTCTGTGGGATGATCTCAGATGCAGGGGCTGGTTT
 TGGGGTTTTCTGCTTGTGCCAAGGGCTGGACACTGCTGGGGGGCTGGAAAGCCCCCTCCCTTCTGTCTCTTCTGT
 GGCTCCATCCCCCTCATGGGTGCTGCCATCCTTCTTGGAGAGAGGGAGGTGAAAGCTGGTGTGAGCCCAGTGGGT
 TCCCGCCCACTCACCAGGAGCTGGCTGGGCCAGGACCGGGAGAGGGAGCACTGCTGCCCTCCTGGCCCTGCTCC
 TTCCGCAATTAGGGGTGGACCGAGCCTCGCTTTCCCACTGTTCTGGAGGGAAGGGGAAGGAGGGGGTCTTCAGG
 CTGGAGCCAGGCTGGGGGTGCTGGGTGGAGAGATGAGATTTAGGGGGTGCCTCATGGGGTGGGCAGGCCCTGGGGT
 GAAATGAGAAAGGCCCAAGCGTGCAGGTCTGCGGAGGGGAAGTGTCTGAGTGAAGGAGGGGACCCCCATCCTG
 GGGGATGCTGGGAGTGAGTGAGTGAGATGGCTGAGTGAGGGTTATGGGGAGCCTGAGGTTTTATGGGCTGTGTA
 TCCCTTCTCCCGCCCCAGCCTGCCTCCCTCCTGCCCCCTGGCCCCACAGGTCTCCCTCTGCTCCCTGTCCCTC
 TGGTGGTTGGGGATGGAGCGGCAGCAAGGGGTGTAATGGGGGTAGGTTCTGTCTTCTACAGGCCACCCCCAGGTC
 CTCAGTGGTTGGCTGGGGAGCCGGACGGGGCTCCTGAGGGGTACAGGTTGGGTGGGGCCCTCCCTGAGGGTCTGGG
 GTCAGGCTTTGGCCTCTGCTGCCCTCTCAGTCACCACTCACCTCCCTCTGAAAATCCAGTCCCTTCTTTGGATGT
 CCTTGTGAGTCACTCTGGGCCTGGCTGTGCTCCCTCCTCAGCTTCTTGTTCCTGGGACAAGGGTCAAGCCAGGAT
 GGGCCAGGCCTGGGATCCCCACCCAGGACCCCCAGGCCCTCCCTGCTGCTTTGCGGGGGGACAGGGCAGA
 AATGGACTCCTTTTGGGTCCCCGAGGTGGGGTCCCTCCAGCCCTGCATCCTCCGTGCCCTAGACCTGCTCCCC

WO 2004/030615

PCT/US2003/028547

3010/6881
FIGURE 2778B

AGAGGAGGGGCCTTGACCCACAGGACGTGTGGTGGCGCCTGGCACTCAGGGACCCCCAGCTGCCGCAGCCCTGGT
CTCTGGCGCATCTCTTCCCTCTTGTCCCGAAGATCTGCGCCTCTAGTGCCTTTTGAGGGGGTTCCCATCATCCCTC
CCTGATATTGTATTGAAAATATTATGCACACTGTTTCATGCTTCTACTAATCAATAAACGCTTTATTT

WO 2004/030615

PCT/US2003/028547

3011/6881
FIGURE 2779

MGDVLSTHLDDARRQHIAEKTGKILTEFLQFYEDQYGVLFNSMRHEIEGTGLPQAQLLWRKVPLDERIVFSGNL
FQHQEDSKKWRNRFSLVPHNYGLVLYENKAAYERQVPPRAVINSAGYKILTSVDQYLELIGNSLPGTTAKSGSAP
ILKCPTQFPLILWHPYARHYF CMMTEAEQDKWQAVLQDCIRHCNNGIPEDSKVEGPAFTDAIRMYRQSKELYGT
WEMLCGNEVQILSNLVMEELGPELKAELGPRKKGKQERQRQWQIISDAVYHMYEQAKARFEEVLSKVQQVQPA
MQAVIRTDMDQIITSKEHLASKIRAFILPKAEVCVRNHVQPYIPSILEALMVPTSQGFTEVRDVFKEVTDMLN
VINEGGIDKLGEYMEKLSRLAYHPLKMQSCYEKMESLRDGLQQRFDVSSTSVMHNSDPNLHLLAEGAPIDWGEYSNSGGG
LLHQELGKGPTKEELCKSIQRVLERVLKKYDYDSSSVRKRFFREALLOISIPFLLKKLAPTCKSELPRFQELIFE
DFARFILVENTYEEVVLQTVMKDILQAVKEAAVQRKHNLYRDSMVMHNSDPNLHLLAEGAPIDWGEYSNSGGG
SPSPSTPESATLSEKRRRAKQVVSVVQDEEVGLPFEASPESPPPASPDGVTEIRGLLAQGLRPESPPAGPLLNG
APAGESPQPKAAPEASSPPASPLQHLLPGKAVDLGPPKPSDQETGEQVSSPSSHPALHTTTEDSAGVQTEF

WO 2004/030615

PCT/US2003/028547

3012/6881
FIGURE 2780

CTCTCGGCTTTTCGGCTCGGAGGAGGCCAAGGTGCAACTTCCTTCGGTCGTCCCGAATCCGGGTTTCATCCGACACC
AGCCGCCTCCACCATGCCGCCGAAGTTCGACCCCAACGAGATCAAAGTCGTATACCTGAGGTGCACCGGAGGTGA
AGTCGGTGCCACTTCTGCCCTGGCCCCCAAGATCGGCCCCCTGGGTCTGTCTCCAAAAAAGTTGGTGATGACAT
TGCCAAGGCAACGGGTGACTGGAAGGGCCTGAGGATTACAGTGAACTGACCATTGAGAACAGACAGGCCCCAGAT
TGAGGTGGTGCCTTCTGCCTCTGCCCTGATCATCAAAGCCCTCAAGGAACCACCAAGAGACAGAAAGAAACAGAA
AAACATTAAACACAGTGGGAATATCACTTTTGATGAGATTGTCAACATTGCTCGACAGATGCGGCACCGATCCTT
AGCCAGAGAACTCTCTGGAACCATTAAAGAGATCCTGGGGACTGCCAGTCAGTGGGCTGTAATGTTGATGGCCG
CCATCCTCATGACATCATCGATGACATCAACAGTGGTGCTGTGGAATGCCAGCCAGTTAAGCACAAAGGAAAAC
ATTTCAATAAAGGATCATTTGACAACCTGGTGA

WO 2004/030615

PCT/US2003/028547

3013/6881
FIGURE 2781

MPPKFDPNEIKVVYLRCTGGEVGATSALAPKIGPLGLSPKKVGDDIAKATGDWKGLRITVKLTIQNRQAQIEVVP
SASALI IKALKEPPRDRKKQKNIKHSGNITFDEIVNIARQMRHRSLARELSGTIKEILGTAQSVGCNVDGRHPHD
IIDDINSGAVECPAS

WO 2004/030615

PCT/US2003/028547

3014/6881
FIGURE 2782

AACCACCATTTTGCAAGGACC**ATG**AGGCCACTGTGCGTGACATGCTGGTGGCTCGGACTGCTGGCTGCCATGGGA
GCTGTTGCAGGCCAGGAGGACGGTTTTGAGGGCACTGAGGAGGGCTCGCCAAGAGAGTTCAATTTACCTAAACAGG
TACAAGCGGGCGGGCGAGTCCCAGGACAAGTGACCTACACCTTCATTGTGCCCCAGCAGCGGGTCACGGGTGCC
ATCTGCGTCAACTCCAAGGAGCCTGAGGTGCTTCTGGAGAACCAGTGCATAAGCAGGAGCTAGAGCTGCTCAAC
AATGAGCTGCTCAAGCAGAAGCGGCAGATCGAGACACTGCAGCAGCTGGTGGAGGTGGACGGCGGCATTGTGAGC
GAGGTGAAGCTGCTGCGCAAGGAGAGCCGCAACATGAACCTCGCGGGTCACGCAGCTCTACATGCAGCTCCTGCAC
GAGATCATCCGCAAGCGGGACAACGCGTTGGAGCTCTCCAGCTGGAGAACAGGATCCTGAACCAGACAGCCGAC
ATGCTGCAGCTGGCCAGCAAGTACAAGGACCTGGAGCACAAGTACCAGCACCTGGCCACACTGGCCCACAACCAA
TCAGAGATCATCGCGCAGCTTGAGGAGCACTGCCAGAGGGTGCCCTCGGCCAGGCCCCGTCCCCAGCCACCCCCC
GCTGCCCCGCCCGGGTCTACCAACCACCCACCTACAACCGCATCATCAACCAGATCTCTACCAACGAGATCCAG
AGTGACCAGAACCTGAAGGTGCTGCCACCCCTCTGCCCACTATGCCCACTCTCACCAGCCTCCCATCTTCCACC
GACAAGCCGTCGGGCCCCATGGAGAGACTGCCTGCAGGCCCTGGAGGATGGCCACGACACCAGCTCCATCTACCTG
GTGAAGCCGGAGAACACCAACCGCCTCATGCAGGTGTGGTGGCAGCAGAGACACGACCCCGGGGGCTGGACCGTC
ATCCAGAGACGCCTGGATGGCTCTGTAACTTCTTCAGGAACCTGGGAGACGTACAAGCAAGGGTTTGGGAACATT
GATGGCGAATACTGGCTGGGCCTGGAGAACATTTACTGGCTGACGAACCAAGGCAACTACAACTCCTGGTGACC
ATGGAGGACTGGTCCGGCCGCAAAGTCTTTGCAGAATACGCCAGTTTCCGCCTGGAACCTGAGAGCGAGTATTAT
AAGCTGCGGCTGGGGCGCTACCATGGCAATGCGGGTGACTCCTTTACATGGCACAACGGCAAGCAGTTTACCACC
CTGGACAGAGATCATGATGTCTACACAGGAACTGTGCCCACTACCAGAAGGGAGGCTGGTGGTATAACGCCTGT
GCCCACTCCAACCTCAACGGGTCTGGTACCGCGGGGGCCATTACCGGAGCCGCTACCAGGACGGAGTCTACTGG
GCTGAGTTCCGAGGAGGCTCTTACTCACTCAAGAAAGTGGTGATGATGATCCGACCGAACCCCAACACCTTCCAC
TAAGCCAGCTCCCCCTCC

WO 2004/030615

PCT/US2003/028547

3015/6881
FIGURE 2783

MRPLCVTCWWLGLLAAMGAVAGQEDGFEGTEEGSPREFIYLNRYKRAGESQDKCTYTFIVPQQRVTGAICVNSKE
PEVLLENRVHKQELELLNNELLKQKRQIETLQQLVEVDGGIVSEVKLLRKESRNMNSRVTQLYMQLLHEIIRKRD
NALELSQLENRIILNQTADMLQLASKYKDLEHKYQHLATLAHNQSEIIAQLEEHQCRVPSARPVPQPPPAAPPRVY
QPPTYNRIINQISTNEIQSDQNLKVLPPPLPTMPTLTSLPSSTDKPSGPWRDCLQALEDGHDTSSIYLVKPENTN
RLMQVWCDQRHDPGGWTVIQRRLDGSVNFFRNWETYKQGFNIDGEYWLGLENIYWLTNQGNKLLVTMEDWSGR
KVFAEYASFRLEPESEYYKLRLGRYHGNAGDSFTWHNGKQFTTLDRDHDVYTGNCAGHYQKGGWWYNACAHSNLNG
VWYRGGHYRSRYQDGVYWAEFRGGSYSLKKVMMIRPNPNTFH

WO 2004/030615

PCT/US2003/028547

3016/6881
FIGURE 2784A

CAGGATATAATTGATACAGCATGTGAAGTATTGGCCGACCCTTCTCTTCCGGAAGTGTCTGGGGAACAGAGCCA
ACTTCTGGCCTTGGGATCATTCTGGACAGTGTGTGTGGAATGTTCCTCCACCTTCTCTCCCACTCCTGCAACTG
CTCCGAGCCCTGGTATCAGGGAAGTCCACAGCCAAAAGGTGTATAGCTTCTTGGATAAGATGTCTTTCTACAAT
GAACTTTATAAACACAAGCCTCATGATGTGATCTCCCATGAAGATGGAAGTCTTTGGCGGAGACAAACACCCAAA
CTCCTTTATCCCTTGGGGGTCAAACCAACCTTCGCATACCTCAAGGCACTGTGGGCCAAGTAATGTTGGATGAT
AGGGCATACTGGTACGCTGGGAATACTCCTATAGCAGCTGGACCCTCTTTACCTGCGAGATTGAAATGTTGCTT
CATGTTGTTTCAACTGCAGATGTGATTGAGCACTGCCAGCGAGTCAAACCCATCATTGATCTCGTCCATAAGGTC
ATCAGTACAGACCTGTGATAGCAGACTGTCTCCTGCCATCACATCTCGCATCTACATGCTGCTGCAGCGGTTA
ACGACAGTGTCTCCCACTGTGGATGTCTTGTCTTCTGTGTCAACTGCTTAACTGTTTTGGCTGCCCGCAAT
CCAGCAAAGGTCTGGACTGATCTTCGTACACAGGTTTTTACCATTGTGGGCCATCTGTCTCCAGCCTGAGT
CAGATGATTAGTGCAGGAAGGGATGAATGCTGGAGGGTACGGAACCTCTTGATGAACAGTGAACAGCCTCAGGGC
GAGTATGGGGTTACTATTGCCTTTCTGCGCTTGATCACCACCCTTGTCAGGGGGCAACTTGGTAGTACCCAGAGC
CAAGGACTTGTACCTGTGTAATGTTTGTGCTGAAGGAGATGCTTCCAGCTACCATAAGTGGCGCTACAACCTCT
CATGGAGTGAGGGAACAGATTGGTTGCCTGATCTTGGAGCTGATTGATGCGATACTGAACCTGTGCCAGGAGACA
GACCTGCACAGCAGTCATACTCCAGCCTGCAGTTTCTCTGCATCTGCAGCCTGGCATAACAGAAAGCAGGACAG
ACAGTTATCAATATCATGGGCATTGGCGTGGACACCATTGACATGGTGATGGCTGCTCAGCCTCGAAGTGATGGG
GCAGAGGGCCAGGGGCGAGGCGCAGCTGCTGATCAAGACAGTGAAGTGGCATTCTCCGTCACCAACAATGTTATT
CGGCTGAAACCTCCTTCTAATGTGGTGTCCCCCTGGAACAGGCTCTCTCACAACATGGTGCTCATGGAACAAC
CTCATTGCTGTTCTAGCCAAATACATCTACCACAAACATGACCCTGCTTTGCCACGTCTTGCCATTGAGCTGCTG
AAACGTCTGGCCACGGTGGCCCCAATGTGAGTGTATGCTTGTCTGGGCAATGATGCGGCTGCCATTGCTGATGCC
TTCCTGACCCGATTGCAGAGCAAAATTGAGGACATGCGCATCAAAGTCATGATTCTAGAGTTCTCTACTGTTGCA
GTAGAGACCCAGCCAGGCCTCATCGAAGTGTCTGAACTGGAAGTTAAGGATGGCAGTGATGGCTCAAAGGAA
TTCAGCCTTGGGATGTGGAGCTGTCTCCATGCAGTGTGGAGCTGATTGATTCCCAACAGCAAGATCGATACTGG
TGCCCCACCCCTGCTGCATCGTGCCGCCATTGCCTTTTTGTCATGCTCTGTGGCAGGATCGGAGGGACAGTGCCATG
CTGGTCTCTCCGAACCAAAACCAAGTTTTGGGAAAATTTAACCAGTCCGCTGTTTGGAACCCCTTCTCTCTCTCT
GAAACATCAGAGCCCAGCATCCTGGAACCTGTGCCCTAATCATGAAGATAATTTGCTTGGAGATATACTATGTA
GTAAAGGGTTTATTAGACCAGTCATTAAAGGATACACTGAAGAAATTTTCCATCGAGAAACGCTTTGCCTACTGG
TCAGGGTATGTCAAGTCATTGGCAGTTACGCTGGCCGAAACAGAAGGCAGCAGCTGCACCTCCTTGTAGAGTAC
CAGATGCTGGTGTCCGCCTGGAGGATGCTTCTCATCATTGCCACCCTCATGCAGATATAATGCACCTGACTGAC
TCTGTGGTGCCTGCCAGCTCTTTCTTGACGTGCTTGATGGAACCAAGCATTACTCCTAGTTCCAGCCTCAGTG
AACTGCCTTCGCCTTGGCTCCATGAAGTGCACTCTGCTGCTTATCCTCCTCCGGCAGTGGAAGAGAGAGTTAGGT
TCTGTGGATGAAATCCTTGGACCCTTGACGGAGATCCTGGAGGGAGTGCTGCAGGCCGACCAGCAACTCATGGAG
AAGACCAAGGCCAAGGTGTTCTCAGCATTATCACAGTGTGCAAATGAAGGAGATGAAAGTAAGTGACATCCCC
CAGTACTCCAGCTGGTGTGATGTCTGTGAGACCCTCCAAGAGGAAGTGATTGCACTCTTCGACCAGACCCGC
CACAGTCTGGCATTAGGCAGTGCCACAGAGGACAAGGACAGCATGGAGACTGACGACTGTTCTCGGTCCCGGCAC
AGGGACCAGCGTGATGGGGTGTGTGCTGGGCTGCACCTGGCCAAGGAGCTGTGTGAGGTAGACGAGGATGGT
GACTCCTGGCTGCAGGTAACCCGCAGGCTCCCCATCCTACCCACCCCTCCTACCACTCTAGAGGTGAGCCTTCGC
ATGAAGCAGAACCTGCATTTCACTGAGGCCACATTGCATCTGCTCCTCACCCTGGCTCGCACTCAGCAGGGAGCC
ACAGCAGTGGCTGGAGCTGGCATCACCCAGAGCATTGTTTGGCCCTTCTGAGTGTGTACCAGCTGAGCACCAC
GGCACAGCACAGACACCTAGTGCTCTCGGAAGTCCCTGGATGCCCCCTCTTGCCAGGAGTCTACCGCCTGTCC
ATGTCCCTGATGGAGCAGCTGCTCAAACTCTGCGCTACAACCTCCTGCTGAGGCCCTGGACTTCGTGGGTGTC
CACCAGGAGCGGACCTTACAGTGCCTCAACGCAGTGAGGACAGTGACAGTCTGGCCTGCCTGGAGGAGGCGGAC
CACACCGTGGGTTTTATTCTGCAGCTCTCTAACTTCAAGGAGTGGCACTTCCACCTGCCTCAGCTCATGCGT
GATATCCAGGTCAACCTGGGTTACTTGTGCCAGGCATGTACCTCTCTCTGACAGTCAAGAGATGCTGCAGCAT
TACTTACAGAACAAAATGGGGATGGCCTCCCTCAGCTGTGCCCCAGCGAGTCCAGAGGCCACCGTCTGCTGCT
TCTGCTGCCCCCTCCTCCTCAAAGCAGCCCGCTGCTGACACAGAGGCATCAGAGCAGCAGGCCTTGACACAGTC
CAGTATGGCCTTCTCAAGATCCTCAGCAAGACGCTGGCAGCCCTGCGCCACTTACCCCCAGATGTCTGCCAGATT
CTGCTGGATCAGTCCCTGGACCTTGCTGAATACAACCTCTCTGTTGCCCCGAGCTTACCCTCCACCTTTGAC

WO 2004/030615

PCT/US2003/028547

3017/6881
FIGURE 2784B

TCCGAAGTGGCCCCCTCCTTCGGGACCCTTCTGGCCACAGTGAATGTGGCCCTCAACATGCTTGGAGAGCTGGAC
AAGAAAAAGGAGCCCCCTCACCCAGGCAGTGGGGCTCAGCACACAGGCAGAAGGGACCAGGACGTTAAAGTCCCTC
CTGATGTTTACCATGGAAAAGTCTTCTACCTGCTCATCTCTCAGGCGATGCGGTACCTTAGGGACCCGGCTGTG
CACCCCCGGGACAAACAGCGGATGAAGCAGGAGCTCAGCTCTGAGTTGAGCACGCTGCTGTCCAGCCTCTCGCGC
TACTTCCGCGGGGAGCCCCCAGCTCCCCTGCCACTGGTGTCTCCCCTCGCCGCAGGGCAAGTCCACCTCTCTC
TCCAAAGCCAGCCCTGAGAGTCAGGAGCCTCTGATCCAGTTGGTGCAGGCGTTTGTCCGGCATATGCAAAGATAG
GGCAGTGCTGTTCTGCCCACCTACCCCTCTCCACCAGCCTACACTGCACCCTGGCTGGCAGGGGTGCTGCTGGCT
GCTAGGGCCTATACAATGGAGGGCACCTCCTGTCACCCCCTCCCGGAGTAGCCACGACTCCAGCCACCACCAC
TGACGTTATTTTATACTAGATGAAGAGGTCAACAGCAGGCATGGGGAGCCGAGTCTTCTGTGCTCAGGTCTCA
CGCTGCAGACGCCCCCTAGAGGAACTTTCCTTCCTTCCAGCATTCCCCACAGCACTGCCGGCCAGGGGAGAGGC
GGCAGCCCAGCAGAGGGCTCTATGCACGGGTTTCAAACCTGTTTTCCACACTCTGTCTTGCAGTTTTGTAATT
CTGTGGTCTATTTATACAGATATTAAAATCTTGTTTATAG

WO 2004/030615

PCT/US2003/028547

3018/6881
FIGURE 2785

MASGGGVRASGRAKMAAAAGGPCVRSSRELWTILLGRSALRELSQIEAELNKHWRRLLEGLSYYKPPSPSSAEKV
 KANKDVASPLKELGLRISKFLGLDEEQSVQLLQCYLQEDYRGTRDSVKTVLQDERQSQUALILKIADYYYEERTCI
 LRCVLHLLTYFQDERHPYRVEYADCVDKLEKELVSKYRQQFEELYKTEAPTWETHGNLMTERQVSRWFVQCLREQ
 SMLLEIIFLYYAYFEMAPSDLLVLTKMFKEQGFGRQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCA
 LDDRRELHQFAQDGLICQDMDCLMLTFGDIPHHAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFYQLTRL
 LQSLASGGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQQDIIDTACEVLADPSLPELFWGTEPTSGLGIILDSV
 CGMFPHLLSPLLQLLRALVSGKSTAKKVYSFLDKMSFYNELYKHKPHDVISHDGTLWRRQTPKLLYPLGGQTNL
 RIPQGTVGQVMLDDRAYLVRWEYSYSSWTLFTCEIEMLLHVVSTADVIQHCQRVKPIIDL VHKVISTDLSIADCL
 LPITSRIYMLLQRLTTVISPPVDVIASCVNCLTVLAARNPAKVWTDLRHTGFLPFVAHPVSSLSQMISAEGMNAG
 GYGNNLMNSEQPQGEYGVTTIAFLRLITTLVKGQLGSTQSQGLVPCVMFVLKEMPLSYHKWRYNSHGVREQIGCLI
 LELIHAILNLCHETDLHSSHTPSLQFLCICSLAYTEAGQTVINIMGIGVDTIDMVMAAQPRSDGAEGQGQQLLI
 KTVKLAFSVTNNVIRLKPPSNVVSPLQALSQHGAGHNNLI AVLAKYIYHKHDPALPRLAIQLLKR LATVAPMSV
 YACLGNDAAAIRDAFLTRLQSKI EDMRIKVMILEFLTVAVETQPG LIELFLNLEVKGSDGSGKEFSLGMWSC LHA
 VLELIDSQQQDRYWCPPLLHRAAIAFLHALWQDRRDSAMLVLR TKPKFWENLTSPLFGTLSPPSETSEPSILETC
 ALIMKIIICLEIYYVVKGSLDQSLKDTLKKFSIEKRFAYWSGYVKSLAVHVAETEGSSCTSLLEYQMLVSAWRMLL
 IIATTHADIMHLTDSVVRQLFLDVLGDGTKALLVPASVNCRLR GSMKCTLLILLRQWKSILSRELGSVDEILG
 PLTEILEGLVLQADQQLMEKTKAKVFSAFITVLQMKEMKVS DIPQYSQVLVNCETLQEEVIALFDQTRHSLALGS
 ATEDKDSMETDDCSRSRHRDQRDGVCVLGLHLAKELCEVDEDEGDSWLQVTRRLPILPTLLTTLEVSLRMKQNLHF
 TEATLHLLLTARTQQGATAVAGAGITQSICLPLLSVYQLSTNGTAQTPSASRKS L DAPSWPGVYRLSMSLMEQL
 LKTLRYNFLPEALDFVG VHQERTLQCLNAVRTVQSLACLEEADHTVGFILQLSNFMKEWHFHL PQLMRDIQVNLG
 YLCQACTSLLHSRKMLQHLYLQNKNGDGLPSAVAQVRQRP PSAASAAPSSSKQPAADTEASEQQALHTVQYGLLKI
 LSKTLAALRHFTPDVCQILLDQSLDLAEYNFLFALSFTTPTFDSEVAPSF GTLLATVNVALNMLGELDKKKEPLT
 QAVGLSTQAEGTRTLKSLMFTMENC FYLLISQAMRYLRDPAVHPRDKQRMKQELSSELSTLLSSLSRYFRRGAP
 SSPATGVLPSPOGKSTSLSKASPESQEPLIQLVQAFVRHMQR

WO 2004/030615

PCT/US2003/028547

3019/6881
FIGURE 2786

AATTTGGCCAGGCTGAGAAGACTGAGCTTGATGCCCACTTTGAAAACCTTCTGGCCCGGGCAGACAGCACCAAGA
ACTGGACAGAGAAGATCTTGAGGCAGACAGAGGTGCTGCTGCAGCCCAACCCAGTGCCCGAGTGGAGGAGTTCC
TGTATGAGAAGCTGGACAGGAAGGTCCCCCTCAAGGGTCACCAACGGGGAGCTGCTGGCTCAGTACATGGCAGACG
CGGCCAGTGAGCTGGGGCCGACCACCCCTATGGGAAGACACTGATCAAGGTGGCAGAAGCTGAAAAGCAACTGG
GAGCCGCGGAGAGGGATTTTATCCACACGGCCTCCATCAGCTTCTCACACCCTTGCGCAACTTCTGGAGGGGG
ACTGGAAGACCATCTCGAAGGAGAGGCGGCTCCTCCAAAACCGGCGTCTGGACTTGGATGCCTGCAAAGCGAGGC
TGAAGAAGGCCAAGGCTGCAGAAGCCAAAGCCACGTGTGAGGGAGATACGGTGCCTGACTTTTCAAGGAGACTAGAC
CTCGTAATTACATTCTCTCGGCCAGCGCCTCCGCGCTCTGGAATGATGAAGTGGACAAGGCCGAGCAGGAGCTCC
GCGTGGCCCGAGACAGAGTTTGACCGGCAAGCAGAAGTGACCCGTCTCTTGCTGGAGGGAATCAGTAGCACTCACG
TGAACCACCTGCGCTGCCTCCACGAGTTCGTCAAGTCTCAGACAACCTACTACGCACAGTGCTACCGCCACATGC
TGGACTTGCAGAAGCAGCTGGGCAGCTCCAGGGTGCCATATTTCCCGGCACCTTCGTGGGCACCACAGAGCCCG
CCTCCCCACCCCTGAGCAGCACCTCACCCACCACTGCTGCGGCCACTATGCCTGTGGTGCCCTCTGTGGCCAGCC
TGGCCCTCCGGGGGAGGCCTCGCTCTGCCTGGAAGAGGTGGCCCCCCTGCCAGTGGGACCCGCAAAGCTCGGG
TGCTCTATGACTACGAGGCAGCCGACAGCAGTGAGCTGGCCCTGCTGGCTGATGAGCTCATCACTGTCTACAGCC
TGCCTGGCATGGACCCTGACTGGCTCATTGGCGAGAGAGGCAACAAGAAGGGCAAGGTCCCTGTACCTACTTGG
AACTGCTCAGTAGGCAGGTGCCCCCATCCCCCCCCGATTCTGGCCTAGGCAGGAGAGGATGGGCGCAGCCCTGC
CACTTAACCTGTTTGTGGTGACACAGTTGTTTCAAGTGGGGAGAATTACCCCATTTCTGTCCCTGCCCCTAGTC
ACCTAGCTGTGAGGGTGCTGAGGCTGAATGGCTCCACCCCTCCCCCAGCCCTGCTTCTGACCTGTGGCTCTGGA
GCCCCTGCCCCCTGCCTGCATCCCCGAGCACCCACCCCTCCAGGCTCCACTAAGGAGGGAGGGGGCTGTCTGCAGCA
GCTGCACTCAGCACCTAGGCCAGGGTGGGGCCGCCGCAGATGGGCTCAGGAAGCCCCAGGTGCACTCAGCGAGAG
CCCTGCCCTTTCAGTTGCCAAAAGCTGCATCAGGGGAATGCGGCAAGGCACACAGGGCTCTGGCAGCCCCCTGGGGA
CTGGGCGCTGCCCCCTGGGAGGGGAGAGCCTGGCCAGGGCTGGTGTGGGGCCGGAGCAGCATCTTCCGGTGCTAT
CCTCCCCCTCCACCCCTCACAGCTCAAGCCAAGTCCAGCGGCCGC

WO 2004/030615

PCT/US2003/028547

3020/6881
FIGURE 2787

ATGCGCCCCGCGCGCCCCGCACTGACATGGCCGTCGCCCCGTTCCGCGCGTCCGCCGCGCGCCGGCCGTTAATAG
GCTTGCTCCCTGAGCGCCCCGCACCGACATGGCGGCCGTCTTCGCTGTGGTGACTTTAACTCTCGGTTTTTCGGTT
ATAGCCGGCCGGCGCTCATTGTCTTCAGGAAGCTCGGAGCCTTTGGTGGAGCCGGGGAGAGGAAGGGTGGGTGC
AAGAGTGAAAGGCGAGAGGGGACTGCAAGCATCCGGGTGGCTCCTGGCCGGAGCAAGATGGCTGAGGGCGAGCG
GCAGCCGCCGCCAGATTCTTCAGAGGAGGCCCTCCAGCCACTCAGAACTTCATCATTCCAAAAAAGGAGATCCA
CACAGTTCCAGACATGGGCAAATGGAAGCGTTCTCAGGCATACGCTGACTACATCGGATTTCATCCTTACCCTCAA
CGAAGGTGTGAAGGGGAAGAAGCTGACCTTCGAGTACAGAGTCTCCGAGATGTGGAATGAGGTTTCATGAGGAAAA
GGAGCAGGCTGCAAAGCAGAGTGTGTCTGCGATGAATGCATACCATTACCCCGCGCCGGGCACTGTGCACCTTC
GGAGGCCATTGAGAACTAGTCGCTCTTCTCAACACGCTGGACAGGTGGATTGATGAGACTCCTCCAGTGGACCA
GCCCTCTCGGTTTTGGGAATAAGGCATACAGGACCTGGTATGCCAACTTGATGAGGAAGCAGAAAACCTTGGTGGC
CACAGTGGTCCCTACCCATCTGGCAGCTGCTGTGCCTGAGGTGGCTGTTTACCTAAAGGAGTCAGTGGGGAACTC
CACGCGCATTGACTACGGCACAGGGCATGAGGCAGCCTTCGCTGCTTTCTCTGCTGTCTCTGCAAGATTGGGGT
GCTCCGGGTGGATGACCAAATAGCTATTGTCTTCAAGGTGTTCATCGGTACCTTGAGGTTATGCGGAAACTCCA
GAAAACATACAGGATGGAGCCAGCCGGCAGCCAGGGAGTGTGGGGTCTGGATGACTTCCAGTTTCTGCCCTTCAT
CTGGGGCAGTTCGCAGCTGATAGACCACCATACTGGAGCCCAGACACTTTGTGGATGAGAAGGCCGCTGAATGA
GAACCACAAGGACTACATGTTCTGGAGTGTATCCTGTTTATTACCGAGATGAAGACTGGCCCCATTTGCAGAGCA
CTCCAACCAGCTGTGGAACATCAGCGCCGTCCCTTCTGGTCCAAAGTGAACCAGGGTCTCATCCGCATGTATAA
GGCCGAGTGCCTGGAGAAGTTCCTGTGATCCAGCACTTCAAGTTCGGGAGCCTGCTGCCCATCCATCCTGTCAC
GTCGGGCTAGGAGGGGCCAAGCCGAAGAGCCACCAGGCCACAGTTCTGTGCCTGCCTTCCCCACCCACAGCAGT
GGCCCTCCCCATCCCCCTCCCTCTGTTCGTCCCGTTTGATGAGAGGCTGTTTACTGGGGTGGGGTGGCGAGATGG
GCTTGAGGGGGCTCAGAGCATAAGGCTTCAGGGCCCAAGTTGGGAGAAGTGACCAAAGTGTAGCCAGTTTTCTGA
GTTCCCGTGTGCTAGACTGGCCAGAAGAGAGGGTCTGGGGCCTGGTCACTCGGCCACTCTCTCCTGTTTTCTGGCC
TCTTCTCCCTTCACTCCCGTCCAGTCTGGTTTTGAGAGCAGGGGCTGTTCTGCAGCACCGCAGGGAAGGGAGGAG
AGATAACCTGCTGCTTCCATTGCTTTTTCCCTTCTCTGGAGTCGATGCCCTTTCTAAGGGTTGGAGCTGCTCCTTGCAG
GGGCGGGTCAGTTTTCCAGGCCATGCCGGGTGGCCATCTATGGTAGGGCTGGAAGCTGAGGCTGGCCGCCAGCT
GTGGGCTGGGGTGGGGTGGGGTGGGGTGGGGTGGGTGGAGAGGCCCTTAGCTGTCCTGGCTGGTGGCCCTCCAGGCT
CCTTTTACCCCTGCCCCCTGGGCCTGAGGCCCCCTGTGTCCAAGCCTCCCCCTGGCTCTTCAGTTCTCTAGCCCT
TGGCTCTGCTGGGTTTTCTGACTGTAGCCACATCTCTCCCGCTCCCTAAGGGTAACCTAGCCAATGGAAGCTGCC
CTTTGGGTAGGTGCTGGGCTCCTGGGAGGGGCCAGATGATGGGGTGGAGCATGTCTTTCCAGAACTTTCCCTGGC
AGGGAGGGGATGGCAGAAACTCAGGGAGGGGCTTGGGGCCCATTTGTATCTGGAGAGCCTGGATTCTCTTGGCAG
TCTTAGGCCCCGGCCACTTCTGCTACCTTTGCGCTGCTGTGAGCCTCACCTGGGCCCTGGGCCCTGCTTCTCTG
CTCCCTTGGGTGATGGGTGGGGCCAGAAGGTGGCAGTCCACACCTTGTCTCTCCACCTCCCTGAACTGTCCATT
GCTTTTATAGGGTGAAGTAAGAGACAGCCTCCCAAGCCCAGGCTTTGGCACTCAGAATGGGCCAGTGGGGGCTG
GGCAGGCCCATTGAGGGCCACCGCCGAGGTTTCTCCTAGGGCTGTTCTGGGCCTGGCTCTTACAGGCTCGTCCC
CCAGGCTGCCCCTTCTCCACTGCCCCCTCCTGTGTCTGGGTCCACACACCCTTCAGGAAGGGGGAGCACTGAGAA
GCACAGCACAGGGGCTCAGCCTGGGATCCGGTGATGGTCTGGGCAGAGGCTGGGTGAGGAGTCCCAAAGGTCAGT
GACAGTTTCTCAGAAGAGGGCCAGCGTCCACCTCTCTCCAGGGCCAGACAGCCCTTCTGGCTCCCCCATCCCC
CTATGGGCTCCCAGCCCCCTGCACCCCTCATTGCTGTTTCAGATTAAAGCCTCTGTTTTGCACCTGT

WO 2004/030615

PCT/US2003/028547

3021/6881
FIGURE 2788

MSSKLLPAGAHLSGSSSEPLVEPGRGRVGRVKGGERGLQASGSAPGRSKMAEGERQPPPDSSSEEAPPATQNFII
PKKEIHTVPDMGKWKRSQAYADYIGFILTLNEG VKGKKLTFEYRVSEMWNEVHEEKEQAAKQSVSCDECIPLPRA
GHCAPSEAIEKLVALNLTDRWIDETPPVDQPSRFGNKAYRTWYAKLDEEAENLVATVVPHTLAAAVPEVAVYK
ESVGNSTRIDYGTGHEAAFAAFLCCLCKIGVLRVDDQIAIVFKVFNRYLEV MRKLQKTYRMEPAGSQGVWGLDDF
QFLPFIWGSSQLIDHPYLEPRHFVDEKAVNENHKDYMFLCILFITEMKTGPFAEHSNQLWNI SAVPSWSKVNQG
LIRMYKAECLEKFPVIQHFKFGSLLPIHPVTSG

WO 2004/030615

PCT/US2003/028547

3022/6881
FIGURE 2789

ATGGAGTGCGCCCTGGACGCCCAGAGCCTGATCAGCATCTCCCTGCGCAAGATCCACAGCTCCCGAACCCAGCGC
GGCGGCATCAAGCTGCACAAGAACCCTCCTGCGCGCCCGCTTCGAGGACTTCTGCCCGGACTCGTCCCCGGACGCG
TCCAACATCTCAAACCTTGATCTCCATCTTTGGCTCCGGCTTCTCGGGGCTGGTGAGCCGACAGCCGGACTCCTCG
GAGCAGCCGCCCGCCGCTCAACGGGCAGCTGTGCGCCAAGCAGGCGCTCGCCAGCCTCGGCGCCTGGACTCGAGCC
ATTGTCGCCTTCTAG

WO 2004/030615

PCT/US2003/028547

3023/6881
FIGURE 2790A

ACAGCACAGACAGATTGACCTATTGGGGTGTTCGCGAGTGTGAGAGGGAAGCGCCGCGGCCTGTATTTCTAGAC
CTGCCCTTCGCTGGTTTCGTGGCGCCTTGTGACCCCGGGCCCTGCCGCTGCAAGTCGGAAATTGCGCTGTGCT
CCTGTGCTACGGCCTGTGGCTGGACTGCCTGCTGCTGCCCAACTGGCTGGCAAGATGAAGCTCTCCCTGGTGGCC
GCGATGCTGCTGCTGCTCAGCGCGGCGCGGGCCGAGGAGGAGGACAAGAAGGAGGACGTGGGCACGGTGGTGGC
ATCGACCTGGGGACCACCTACTCCTGCGTGGCGTGTCAAGAACGGCCGCGTGGAGATCATGCCAACGATCAG
GGCAACCGCATCAGCCGTCCTATGTCGCCCTTCACTCCTGAAGGGGAACGTCTGATTGGCGATGCCGCCAAGAAC
CAGCTCACCTCCAACCCCGAGAACACGGTCTTTGACGCCAAGCGGCTCATCGGCCGCACGTGGAATGACCCGTCT
GTGCAGCAGGACATCAAGTCTTGGCGTTCAAGGTGGTTGAAAAGAAAATAAACCATAACATTCAAGTTGATATT
GGAGGTGGGCAAACAAAGACATTTGCTCCTGAAGAAATTTCTGCCATGGTTCTCACTAAAATGAAAGAAACCGCT
GAGGCTTATTTGGGAAAGAAGGTTACCCATGCAGTTGTTACTGTACCAGCCTATTTTAATGATGCCAACGCCAA
GCAACCAAAGACGCTGGAACATTTGCTGGCCTAAATGTTATGAGGATCATCAACGAGCCTACGGCAGCTGCTATT
GCTTATGGCCTGGATAAGAGGGAGGGGAGAAGAATCCTGGTGTGTTGACCTGGGTGGCGGAACCTTCGATGTG
TCTCTTCTCACCATTGACAATGGTGTCTTCGAAGTTGTGGCCACTAATGGAGATACTCATCTGGGTGGAGAAGAC
TTTGACCAGCGTGTGATGGAACACTTCATCAAACTGTACAAAAGAAAGACGGGCAAAGATGTCAGGAAAGACAAT
AGAGCTGTGCAGAACTCCGGCGCGAGGTAGAAAAGGCCAAACGGGCCCTGTCTTCTCAGCATCAAGCAAGAATT
GAAATTGAGTCCTTCTATGAAGGAGAAGACTTTTCTGAGACCTGACTCGGGCCAAATTTGAAGAGCTCAACATG
GATCTGTTCCGGTCTACTATGAAGCCCGTCCAGAAAGTGTGGAAGATTCTGATTTGAAGAAGTCTGATATTGAT
GAAATTGTTCTTGTGGTGGCTCGACTCGAATTCAAAGATTGAGCAACTGGTTAAAGAGTTCTTCAATGGCAAG
GAACCATCCCGTGGCATAAACCCAGATGAAGCTGTAGCGTATGGTGTGCTGTCCAGGCTGGTGTGCTCTCTGGT
GATCAAGATACAGGTGACCTGGTACTGCTTGATGTATGTCCCTTACACTTGGTATTGAACTGTGGGAGGTGTC
ATGACCAAACCTGATTCCAAGGAACACAGTGGTGCTACCAAGAAGTCTCAGATCTTTTCTACAGCTTCTGATAAT
CAACCAACTGTTACAATCAAGGTCTATGAAGGTGAAAGACCCCTGACAAAAGACAATCATCTTCTGGGTACATTT
GATCTGACTGGAATTCCTCCTGCTCCTCGTGGGGTCCACAGATTGAAGTCACCTTTGAGATAGATGTGAATGGT
ATTCTTCGAGTGACAGCTGAAGACAAGGGTACAGGGGAACAAAATAAGATCACAATCACCATGACCAGAATCGC
CTGACACCTGAAGAAATCGAAAGGATGGTTAATGATGCTGAGAAGTTTGCTGAGGAAGACAAAAGCTCAAGGAG
CGCATTGATACTAGAAATGAGTTGAAAGCTATGCCTATTCTCTAAAGAATCAGATTGGAGATAAAGAAAAGCTG
GGAGGTAAACTTTCTCTGAAGATAAGGAGACCATGGAAAAAGCTGTAGAAGAAAAGATTGAATGGCTGGAAAGC
CACCAGATGCTGACATTGAAGACTTCAAAGCTAAGAAGAAGGAACCTGGAAGAAATTGTTCAACCAATTATCAGC
AACTCTATGGAAGTGCAGGCCCTCCCCAACTGGTGAAGAGGATACAGCAGAAAAAGATGAGTTGTAGACACTG
ATCTGCTAGTGCTGTAATATTGTAAATACTGGACTCAGGAACCTTTTGTTAGGAAAAAATTGAAAGAACTTAAGTC
TCGAATGTAATTGGAATCTTCACCTCAGAGTGGAGTTGAAACTGCTATAGCCTAAGCGGCTGTTTACTGCTTTTC
ATTAGCAGTTGCTCATATGCTTTGGGTGGGGGGGAGAAGAAGAATTGGCCATCTTAAAAAGCAGGTAAAAACC
TGGGTTAGGGTGTGTGTTACCTTCAAAATGTTCTATTTAACAACCTGGGTGATGTGCATCTGGTGTAGGAAGTTT
TTTCTACCATAAGTGACACCAATAAATGTTTGTTATTTTACACTGGTCTAATGTTTGTGAGAAGCTTCTAATTAGA
TCAATTACTTATTTTAGGAAATTTAAGACTAGATACTCGTGTGTGGGGTGAGGGGAGGGAGTATTTGGTATGTTG
GGATAAGGAAACACTTCTATTTAATGCTTCCAGGGATTTTTTTTTTTTTTTTTTAAACCCTCCTGGGCCCAAGTGA
TCCTTCCACCTCAGTCTCCAGCTAATTGAGACCACAGGCTTGTACCACCATGCTCGGCTTTTGCATTAATCTA
AGAAAAGGGGAGAGAAAGTTAATCCACATCTTTACTCAGGCAAGGGGCATTTACAGTGCCCAAGAGTGGGGTTTT
CTTGAACATACTTGGTTTCCTATTTCCCTTATCTTTCTAAAACCTGCCTTTCTGGTGGCTTTTTTTAAATTTAT
ACTAATGATGCTTTTATAGCTGCTTGGATTCTCTGAGAAATGATGGGGAGTGAGTGATCACTGGTATTAACTTTA
TACACTTGGATTTCATTTGTAACCTTTAGGATGTAAAGGTATATTGTGAACCTAGCTGTGTGAGAATCTCCATCC
CTGAAATTTCTCATTAGTGGTACTGGGGTGGGATCTTGGATGGTGACATTGAACTACACTAAATCCCTCACTA
TGAATGGGTTGTTAAAGGCAATGGTTTGTGTCAAACTGGTTTAGGATTACTTAGATTGTGTTCTGAAGAAAAG
AGTCCAGGTGAATGGTATGATCAATAAAGGACAGGCTGGTGTCTAACATAAAATCCAATATTGTAATCCTAGCACT
TTGGGAGGCCAAGGCGGGTGGATCACAAGGTCAAGAGATAGAGACCATCTTTGCCAACATGGTGAACTCCATCT
CTACTGAAAATACAAAAATTAGCTGGGCGTGGTAGTGCAAGCTGAAGGCTGAGGCAGGAGAATCACTCGAACCCG
GGAGGCAGAGGTTGCAGTGAGCCGAGATCACACCCTGTACTCCAGCCCGGCACTCCAGCCTGGCGACAAGAGTG
AGACTCCACCTCAAAAAAAGAAATCCAATACTGCCCAAGGATAGGTATTTTATAGATGGGCAACTGGCT

WO 2004/030615

PCT/US2003/028547

3024/6881
FIGURE 2790B

GAAAGGTTAATTCTCTAGGGCTAGTAGAACTGGATCCCAACACCAAACCTCTTAATTAGACCTAGGCCTCAGCTGC
ACTGCCCGAAAAGCATTGTGGGCAGACCCTGAGCAGAATACTGGTCTCAGGCCAAGCCCAATACAGCCATTAAAGA
TGACCTACAGTGCTGTGTACCC'TGGGGCAATAGGGTTAAATGGTAGTTAGCAACTAGGGCTAGTCTTCCCTTACC
TCAAAGGCTCTCACTACCGTGGACCACCTAGTCTGTAACCTCTTCTGAGGAGCTGTTACTGAATATTAAAAAGAT
AGACTTCAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3025/6881
FIGURE 2791

MKLSLVAAMLLLLSARAEEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIIANDQGNRITPSYVAFTPEGERL
IGDAAKNQLTSNPENTVFDKRLIGRTWNDPSVQQDIKFLPFKVVEKKTTPYIQVDIGGGQTKTFAPEEISAMVL
TKMKETAAYLGKKVTHAVVTPAYFNDAQRQATKDAGTIAGLNVMRIINEPTAAAIAYGDKREGEKNILVFDL
GGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDFDQRVMEHFIKLYKKKTGKDVRKDNRAVQKLRRVEVEKAKRALS
SQHQARIEIESFYEGEDFSETLTRAKFEELNMDLFRSTMKPVQKVLESDLKKSDDIDEIVLVGGSTRIPKIQQLV
KEFFNGKEPSRGINPDEAVAYGAAVQAGVLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKLIPRNTVVPTKKSQI
FSTASDNQPTVTIKVYEGERPLTKDNHLLGTFDLTGIPAPRGVPQIEVTFEIDVNGILRVTAEDKGTGNKNKIT
ITNDQNRLTPEEIERMVNDAEKFAEEDKKLKERIDTRNELESYAYSLKNQIGDKEKLGGKLSSDKETMEKAVEE
KIEWLESHQDADIEDFKAKKKELEEIVQPIISKLYGSAGPPPTGEEDTAEKDEL

WO 2004/030615

PCT/US2003/028547

3026/6881
FIGURE 2792

CCTAAGTCGCCGCGAGAACTGCCACGTGGGGATGAGATTTGCTGGGCTGGTAGCGGCGGCTGCTGCGGGGAGGTCC
CGCCCACGTGAAGCCAGCCTAACTGAGCTCTGGACTTTGGGGACAGCTGTCAGTGGCCTAGGCCGCGAGGACACCA
TGAAGCAACTGCCAGTCTTGGAACCTGGAGACAAGCCCAGGAAAGCAACATGGTAACCTTGACTGTCCCTGGAG
ACAGCCCCGTGTGCTCGAGTTGGCCACAGCTGTTTCATATTTACCCCCAGTTGGTAATGCCAAGAGAGGGAAGGTCT
TCATTGTTGGGGGAGCAAATCCAAACAGAAGCTTCTCAGACGTGCACACCATGGATCTGGGAAAACACCAGTGGG
ACTTAGATACTGCAAGGGCCTCTTGCCCCGGTATGAACATGCTAGCTTCATTCCCTCCTGCACACCTGACCGTA
TTTGGGTATTTGGAGGTGCCAACCAATCAGGAAATCGAAATTGTCTACAAGTCCTGAATCCTGAAACCAGGACGT
GGACCACGCCAGAAGTGACCAGCCCCCACCATCCCCAAGAACATTCCACACATCATCGGCAGCCATTGGAAACC
AGCTATATGTCTTTGGGGGTGGAGAGAGAGGTGCCAGCCGTGCAGGACACGAAGCTGCATGTGTTTGACGCAA
ACACTCTGACCTGGTCACAGCCAGAGACACTTGGAATCCTCCATCTCCCCGGCATGGTCATGTGATGGTGGCAG
CAGGGACAAAGCTCTTCATCCACGGAGGCTTGGCGGGGGACAGATTCTATGATGACCTCCACTGCATTGATATAA
GTGACATGAAATGGCAGAAGCTAAATCCCACTGGGGCTGCTCCAGCAGGCTGTGCTGCCCCACTCAGCTGTGGCCA
TGGGAAAACATGTGTACATCTTTGGTGGAATGACTCCTGCAGGAGCACTGGACACAATGTACCAGTATCACACAG
AAGAGCAGCATTGGACCTTGCTTAAATTTGATACTCTTCTACCCCTGGACGATTGGACCATTCCATGTGTATCA
TTCCATGGCCAGTGACGTGTGCTTCTGAGAAAGAAGATTCCAACCTCTCTCACTCTGAACCATGAAGCTGAGAAAG
AGGATTGAGTTGACAAAGTAATGAGCCACAGTGGTGACTCACATGAGGAAAGCCAGACTGCTACACTGCTCTGTT
TGGTGTGTTGGTGGGATGAATACAGAAGGGGAAATCTATGACGATTGTATTGTGACTGTAGTGGACTTAATAAAACC
CACATTTTTATTAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3027/6881
FIGURE 2793

MKQLPVLEPGDKPRKATWYTLTVPGDSPCARVGHSCSYLPPVGNARGKVFIVGGANPNRSFSDVHTMDLGKHQW
DLDTCKGLLPRIEYHASFIPSCTPDRIWVFGGANQSGNRNCLQVLNPETRTWTTPEVTSPPPSPRTFHTSSAAIGN
QLYVFGGGERGAQPVQDTKLHVFDANTLTWSQPETLGNPPSPRHGHVMVAAGTKLFIHGGLAGDRFYDDLHCIDI
SDMKWQKLNPTGAAPAGCAAHSAMGKHVYIFGGMTPAGALDTMYQYHTEEQHWTLKFDTLPPGRLDHSMCI
IPWPVTCASEKEDSNSLTNLNHEAEKEDSVDKVMHSGDSHEESQTATLLCLVFGGMNTEGEIYDDCIVTVVD

WO 2004/030615

PCT/US2003/028547

3028/6881
FIGURE 2794

CTTCCTCTTTCCCTCGGAGCGGGCGGGCGGCGTTGGCGGCTTGTGCAGCAATGGCCAAGATCAAGGCTCGAGATCT
TCGCGGGAAGAAGAAGGAGGAGCTGCTGAAACAGCTGGACGACCTGAAGGTGGAGCTGTCCCAGCTGCGCGTCGC
CAAAGTGACAGGCGGTGCGGCCTCCAAGCTCTCTAAGATCCGAGTCGTCCGGAAATCCATTGCCCCGTGTTCTCAC
AGTTATTAACCAGACTCAGAAAGAAAACCTCAGGAAATTCTACAAGGGCAAGAAGTACAAGCCCCCTGGACCTGCG
GCCTAAGAAGACACGTGCCATGCGCCGCCGGCTCAACAAGCACGAGGAGAACCTGAAGACCAAGAAGCAGCAGCG
GAAGGAGCGGCTGTACCCGCTGCGGAAGTACGCGGTCAAGGCCTGAGGGGCGCATTGTCAATAAAGCACAGCTGG
CTGAG

WO 2004/030615

PCT/US2003/028547

3029/6881
FIGURE 2795

MAKIKARDLRGKKKEELLKQLDDLKVELSQLRVAKVTGGAASKLSKIRVVRKSIARVLTVINQTOKENLRKFYKG
KKYKPLDLRPKKTRAMRRRLNKHEENLTKKKQQRKERLYPLRKYAVKA

WO 2004/030615

PCT/US2003/028547

3030/6881
FIGURE 2796

GCCGTGTCGCCACCATGGCTCCGCACCGCCCCGCGCCCGCGCTGCTTTGCGCGCTGTCCCTGGCGCTGTGCGCGC
TGTCGCTGCCCCGTCCGCGCGGCCACTGCGTCGCGGGGGCGTCCCAGGCGGGGGCGCCCCAGGGGCGGGTGCCCCG
AGGCGCGGCCAACAGCATGGTGGTGGAAACCCCCGAGTTCTCAAGGCAGGGAAGGAGCCTGGCCTGCAGATCT
GGCGTGTGGAGAAGTTTCATCTGGTGGCGTCCACCAACCTTTATGGAGACTTCTTACGGGCGACGCCCTACG
TCATCCTGAAGACAGTGCAGCTGAGGAACGGAAATCTGCAGTATGACCTCCACTACTGGCTGGGCAATGAGTGCA
GCCAGGATGAGAGCGGGGCGGCCCATCTTTACCGTGCAGCTGGATGACTACCTGAACGGCCGGGCGCTGCAGC
ACCGTGAGGTCCAGGGCTTCGAGTCGGCCACCTTCCTAGGCTACTTCAAGTCTGGCCTGAAGTACAAGAAAGGAG
GTGTGGCATCAGGATTCAAGCACGTGGTACCCAACGAGGTGGTGGTGCAGAGACTCTTCCAGGTCAAAGGGCGGC
GTGTGGTCCGTGCCACCGAGGTACCTGTGTCTGGGAGAGCTTCAACAATGGCGACTGCTTCATCCTGGACCTGG
GCAACAACATCCACAGTGGTGTGGTTCCAACAGCAATCGGTATGAAAGACTGAAGGCCACACAGGTGTCCAAGG
GCATCCGGGACAACGAGCGGAGTGGCCGGGCGCGAGTGCAGTGTCTGAGGAGGGCACTGAGCCCGAGGCGATGC
TCCAGGTGCTGGGCCCCAAGCCGGCTCTGCCTGCAGGTACCGAGGACACCGCCAAGGAGGATGCGGCCAACCGCA
AGCTGGCCAAGCTCTACAAGGTCTCCAATGGTGCAGGGACCATGTCCGTCTCCCTCGTGGCTGATGAGAACCCCT
TCGCCCCAGGGGGCCCTGAAGTCAGAGGACTGCTTCATCCTGGACCACGGCAAAGATGGGAAAATCTTTGTCTGGA
AAGGCAAGCAGGCAAACACGGAGGAGAGGAAGGCTGCCCTCAAAACAGCCTCTGACTTCATCACCAGATGGACT
ACCCCAAGCAGACTCAGGTCTCGGTCTTCTGAGGGCGGTGAGACCCCACTGTTCAAGCAGTTCTTCAAGAACT
GGCGGGACCCAGACCAGACAGATGGCCTGGGCTTGTCTACCTTTCCAGCCATATCGCCAACGTGGAGCGGGTGC
CCTTCGACGCGCCACCCTGCACACCTCCACTGCCATGGCCGCCCAGCACGGCATGGATGACGATGGCACAGGCC
AGAAACAGATCTGGAGAATCGAAGGTTCCAACAAGGTGCCCGTGGACCCTGCCACATATGGACAGTTCTATGGAG
GCGACAGCTACATCATTCTGTACAACCTACCGCCATGGTGGCCGCCAGGGGCGAGATAATCTATAACTGGCAGGGTG
CCCAGTCTACCCAGGATGAGGTGCTGCATCTGCCATCCTGACTGCTCAGCTGGATGAGGAGCTGGGAGGTACCC
CTGTCCAGAGCCGTGTGGTCCAAGGCAAGGAGCCCCGCCACCTCATGAGCCTGTTTGGTGGGAAGCCCCATGATCA
TCTACAAGGGCGGCACCTCCC GCGAGGGGCGGGCAGACAGCCCCTGCCAGCACCCGCTCTTCCAGGTCCGCGCCA
ACAGCGCTGGAGCCACCCGGGCTGTTGAGGTATTGCCTAAGGCTGGTGCAGTGAACCTCAACGATGCCCTTTGTTT
TGAAAACCCCTCAGCCGCCTACCTGTGGGTGGGTACAGGAGCCAGCGAGGCAGAGAAGACGGGGGCCAGGAGC
TGCTCAGGGTGTGCGGGGCCAACCTGTGCAGGTGGCAGAAGGCAGCGAGCCAGATGGCTTCTGGGAGGCCCTGG
GCGGGAAGGCTGCCTACCGCACATCCCCACGGCTGAAGGACAAGAAGATGGATGCCATCCTCCTCGCCTCTTTG
CCTGCTCCAACAAGATTGGACGTTTTGTGATCGAAGAGGTTCTGGTGAGCTCATGCAGGAAGACCTGGCAACGG
ATGACGTGATGCTTCTGGACACCTGGGACCAGGTCTTTGTCTGGGTGGAAAGGATTCTCAAGAAGAAGAAAAGA
CAGAAGCCTTGACTTCTGCTAAGCGGTACATCGAGACGGACCCAGCCAATCGGGATCGGCGGACGCCCATCACCG
TGGTGAAGCAAGGCTTTGAGCCTCCCTCCTTTGTGGGCTGGTTCCTTGGCTGGGATGATGATTACTGGTCTGTGG
ACCCCTTGGACAGGGCCATGGCTGAGCTGGCTGCCTGAGGAGGGGCGAGGGCCACCCATGTCACCGGTGAGTGCC
TTTTGGAAGTGTCTTCCCTCAAAGAGGCCTTAGAGCGAGCAGAGCAGCTCTGCTATGAGTGTGTGTGTGTGT
GTGTTGTTTCTTTTTTTTTTTTACAGTATCAAAAATAGCCCTGCAAAAATTCAGAGTCTTGCAAAAATGTC
TAAAATGTCAGTGTGGGAAATTAAATCCAATAAAAACATTTTGAAGTGTG

WO 2004/030615

PCT/US2003/028547

3031/6881
FIGURE 2797

MAPHRPAPALLCALSLALCALSLPVRAATASRGASQAGAPQGRVPEARPNSMVVEHPEFLKAGKEPGLQIWRVEK
FDLVPVPTNLYGDDFTGDAYVILKTVQLRNGNLQYDLHYWLGNECSQDESGAAAIFTVQLDDYLNGRAVQHREVO
GFESATFLGYFKSGLKYYKKGGVASGFKHVVPNEVVVQRLFQVKGRRVVRATEVPVSWESFNNGDCFILDLGNNIH
QWCGSNSNRYERLKATQVSKGIRDNERSGRARVHVSEEGTEPEAMLQVLGPKPALPAGTEDTAKEDAANRKLAKL
YKVSNGAGTMSVSLVADENPFAQGALKSEDCFILDHGKDGKIFVWKGKQANTEERKAALKTASDFITKMDYPKQT
QVSVLPEGGETPLFKQFFKNWRDPDQTDGLGLSYLSSHIANVERVPFDAATLHTSTAMAAQHGMDDDGTTGQKQIW
RIEGSNKVPVDPATYGGFYGGDSYIILYNYRHGGRQGGIIYNWQGAQSTQDEVAASAILTAQLDEELGGTPVQSR
VVQGKEPAHLMSLFGGKPMIYKGGTSREGGQTAPASTRLFQVRANSAGATRAVEVLPKAGALNSNDAFVLKTPS
AAYLWVG TGASEAEKTGAQELLRLRAQPVQVAEGSEPDGFWEALGGKAAYRTSPRLKDKKMDAHPPLRFACSNK
IGRFVIEEVPGELMQEDLATDDVMLLDTWDQVFVWVGKDSQEEKTEALTSAKRYIETDPANRDRRTPTTVVKQG
FEPPSFVGVFLGWDDDYWSVDPLDRAMAELAA

WO 2004/030615

PCT/US2003/028547

3032/6881
FIGURE 2798A

GTTTAGTATTTTTGAGAACCCAGCCACCTGGCCATGCTGTACCAGCCTTGCTGCTGAGTGCTGGGGATAAAGGAAC
AAATAAAACCCAGTCCAGGCTTCTGTGTGCCAGCCCTGTGCCGGGTCCCAGTGGGTAACAGCATGTCCAATCCC
CTCAGTGTCCCACTAGAGGCTTCTTTGGGGCTGCTGGGGACATCTTGTTTCTAGTTGAGAATTCAGATTTATGT
CCAAAGACAAGAATCCCTGAGGGGCAGATTACAACATGGACTGGGCCATTACAATCAACAAGGACACAAAGCTA
ACACAGCCATCGTTATACACCAGACATGTGCTAAGGACTTGATTTCCCCATTGTTTAAATCATCACCACCTCCATT
ATCACCCCCATTTACAGATGTGGAACCTGAGGCTGAGAAGAGTAAGGGACTTGTTCCAAGGGCAGAGCAAGTC
AGGGCTACGGTGATGTTTTAGGGCCAGACCTGTTTGCTCTGGAGCCCAGGGTTTAAACACACCCCACTGCTGCTG
TGAAAGGGCTCTGGACAGCTCAGGCTGGCCGGCCAATTCGGGGATAACCGAACAGAGGTATGGAACAGAAAGGGG
CGTTGAGGATGTTGCTGTGTGTGTGCGGTGGGGGGAGTGACAAGGCTTCAGCAATGGTACTCATTCTCTCCAACC
AGCTCCCAGTGCTGCTGTCTCTGATCCACCCTCCGCTCTGCCTGCCATGGACTAATTGTTCTGAAATCCCATGG
ATCAAGTCACTCCTCAGCTGAGGACCTGTCCATGGCTCCCTGGTACCCAGAGGATAGAAACCCAGCATTCAAAAC
CTCTCTAACCACTCCCACTCAACCTCACACTCCTGCTCACTAGCCCCAGGCGCAGTGGGCTCTTCCAGCG
GCCAAGCCTGTGCCTACGGTGCCTTCTTGCTGGAATGCCCAACTCCCCCTTCTCAGCCTTCTTTGACTCTCAAG
TAAGGAAAAGCACTCTTTGTCTCCCTGAGCCCCCTTGGCACTTATCACAGAGCACTCTGGGCGTTAACTTCCACTG
TCTCCGTCTTGATTAGAGTGGATCTCAGAGGGCCCCGGTGGTGTCTGCTTACCTCCCTCTCCACTGCAGCAGCT
TAGCAAGGACTGGCCGGGTAACTAAAAAATGCAAAGAGCTGAGAGAATCTGGGAAAGTGACATTTCCAGGA
CTGCCCAATGACAAGCCCCGTACCAAGGCACAGCATCAGGATACCCTGATGTGGAAGAACCAAAATTCACCCCT
CATGGCTTATCAGGATGGTCTTGTGTCTGTCCCTTTCAAGGGTTCTGATAATGAAATCTGGGCAAGTCACCCCTC
CTGCTTTAAACTTTCAATGGTTCCAGAGGTCTAGCATAAAATCCAACTCAAGGGCCCACATAACCTAGGTGC
TGCTTGCCCCCAGGCCCTCCTCTTGCCACGCCCCCTCCCTGGCCAGCCTCCCTCACTTCTTTAGTTTCTCAA
GGACTCCCCCTCACTAAAGCCTTACCCAGGTGCCTCTCTGCCTAGGGGGCTCCTCCATTCCCTGCTCACTCAGC
CACCTCCCTCTCCCTCTTCAGGTCTCACTTTTTAGGGGAGGCTTCCCTGATCTGTCCAGATAAGACCTCACCCT
CCCACCAATCCCAAACGCTCCCATACCTGATCGTTTCCCTTACAGCAAGAATTAATCTTCAGTGTAATAATG
ATCTACTGAAGACCTATGAGGAATGGGAAAGTCTTGTTTTTGTGATTCTTCAACACCCAGCTCAGAGCCTAAA
TATCTCTCAAATGAATGAATATATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGA
AAGACAAGAAGGTGGGCAGAATCCTAGGGAACACTGAGGCAGGAAAAGCAGGGCCCTGGGGCAGGCGTCATGGCT
CACACCTGTAATCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCACTTGAGGTCAGGACTTTGAGACCAGCCTG
GCCAATGTTAAACCTGTCTCTACTAAAAACACAAACATTAGCCGGGTATGGTGGCACATGCCTGTAGTCCC
AGCTACTCAAGAGGCTGAGGCAGGAGAATCACTTGTACCTGGGAGGAGGAGGTTGCAGTGAGCTGAGATCGTGCC
ACTGCACTCCAGCCTGGGCACCAACAGCAAGACTCCGTCTAAAAAAGAAAAAGAAAAAGAAAAAGAA
AAAGAAAAACAGGGCCCTAACTAAAAAAGACAGGAGGAAAAACAGGGCCCTAACTAAAAAGAGAGGAGGGGCCCT
AACTGAAAAAACAGGGCCCTAACTAAAAAAGTCAGGAGGAAAAACAGGGCCCTAACTAAAAAGAGAAGAGGAA
TAAACCAGACAGTGCAGCCTCCCAAGCAAAAGGAGGGAGTTTCTGGAATGCACTAGAGACTGGCACATGGAG
TCCTGAGGAAAGAGCACTGGATTGGACATCGAGGAGGTCACTGGGGCCTCCCTGATTGAACCAAGGTTCCGTGGA
GGTGGGCACAGGGCTGGTACATTGCAGGGGGCAGAGGAGTAAAGAGGGATGAATAAGCAAAGCTCTCAGGCGACG
GTTGCTCAGCTGGGTCTATGCCAGCCTGGCCCTGCAGGGTCTGCGGAAGACAGGGCCCTGTGTCTATAGTCACCA
AAAGCATCAACAGAGCATAACATTCTTTTTGTTGACAGATTACATTGAGGCAACTTGGCTTTTGGAGTTATCAGG
GCTCAGTCTCAAAGGCAGATGCATCAGAGCCAAGACCCGGCCCTCAAGTCTCCTATTAGGGCAGCACTAGGGCT
ACCTCTTTGTGACAGAACCTTTGGATAGCCGCTGATGGGGTGAGTCAGCTTTCTGGGCCCGGCAGACCTTTTG
GAATCCCTGGCTTTTGGGGCACAACATCCTGGGGACCACCAAAAGCCCTTTACCTGAGCTTTGGGAAAGAGGA
ACAGCTCCGGCTGTGGGTGGCTCATGTACCATCTGGAAGCCAGCTGGGCCACAGCAGACGCGTAAGTCTGTAT
TCATTATCCCTTCTCCTTTTGGCAGAAAAGGGATGGCGTGGGTGGAGGGGTGTTTTCTGGGTCTTTGCACA
ATTGCTCATTAGAAATCACTTCTGTTTGGGTGTTGGAAGCTGGGCGATTCCCCCTAGTAGTAGTATCCTTCTGTC
TCACTGGTCACAAAGCCCTTTGGCATCTACAAGCTCGTTGGGTCCACACAGCAGCTTTGTTAGGTGGGTAGGGG
AGACCAAGGCACCCATCCTACAGGTGGAGAAACCGAGGCTGAAGCTGGGAGGTGAGCCAGTCTCCTGGCTTCCAG
CCCAGGACTCTGCACTCCTCCCCCACCTCCCCACCTACTTCAGCAGGTACCTGTGAATCTGATAGTCAGGTGG
GCCCCACCTGCCAGCTGGCCCCAGCGGGCATGACTCATCCGCTTCCCCATGACTCACACACCTCAGGTGCTCCT
CCTCTGGTCAACAAGTCCAGAGACTTGGCAAATGGACCCCCATTTTTCTACCTCTCCAAGCCTCTGGGAAGAA

WO 2004/030615

PCT/US2003/028547

3033/6881
FIGURE 2798B

TTCTGACCTCCTCTTTATGGGGACTCTGCTCTTCTACAGAATAGCAACCAAGGCCTTGAGAGGGAAAGCAACT
CTCCTAAAGTCACATAGCAAGCAACCAGCACAGCCAGGGTGGGAGCCAGGCATCCGGGCACCGAGCCCAGTCCCG
GCCTCCTCCCTACAAGATCACTCTCGCCTGACCTCCCTCTCAAGGACAGGAAAGGAGCAGAGACGCACTCTGAGC
CTTATTAGGAAGACCTCAGGGACTCCCACTGAATCCACTGTGGCTACAGCGGCTGCTTCCACCACTGAAGTCCCC
TCCAGGCTTCCCTGGGCAGCCAGGGCGGGGTTTAAGAGGACGACAGGTGTCTGTATTGCTCTACCTACCTAACAA
GGCTGTGCAGGGTGAAGAGTGCTGCTCCGTGGGAAGGCGCTGGGACCAAGGCCGAAGCACTGGACAAAGAGAGCT
ATGAGCACTACCTGTAAACAAAGGGCACAAGAATGTCAGCCTCAGGGGGAGTTCAAGGTCATCTGGTCAAATCCCC
ATTTGATGTTTCAACCCCTTTCTCCCTCCACCAGGGGTCACACAATCAGTACTTGCACACATCCAGCAACACC
GCACTCACTACCTGCCAAGGCTGCAAGACCTGCTGCTGGAGGGTTTGGCTGCGTAAAAGAATTGTCCTAAGGATG
CACTAAATCTCTCTCTTCTTATGCTTGTACCTGCTGGTATTAGCTCTGCCTCCTTTTGGGTCAGCCAGAACAG
GTCTGTCCCCCTCTTTCTGATGGCTCTTTGGAGATTTGAAGACAGTGATCCTGGGCCCTCAAGTCTTCTACAA
ATTGTGCACCCCTTTCTCCAGCTCTTCTGAGACCAGGGTTTCCGGTTCGCTCACCTGTTCCCTGATCTGCT
CCAGATGAAACCTGTCCCTACTGACAGCACAAAGACCCAGAATTAGACAATCAGTCAAGCTCTATCCAGGACAGGG
CAAGCAGGACTCTCACCTCCTTCATTAGAGATATCATGCTTCTATTAATTGAGCCTAAAATCCCATTTGCATTTA
AGGCAGCCCTATTGCATGGCTGAATTCAGTTTACAGTCAACTTCAGAGCTGTACGTTAGTACTCTGAAGTTATAT
AAACTGGGCCCTCACTTAACTGTGTAACCTTGAGCAAGC

WO 2004/030615

PCT/US2003/028547

3034/6881
FIGURE 2799

AGGATGGCAATGCCAGTGGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGA
CTGGTGTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAACTGTCTGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTTCGTCTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCTGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAATGGCAAGGTCACCAAGTCTGCCCAGAAAGCTCAGAAGGCTAAATGAA
TATTATCCCTAATACCTGCCACCCCACTCTTAATC

WO 2004/030615

PCT/US2003/028547

3035/6881
FIGURE 2800

GTTTGCCGCCAGAACACAGGTGTCGTGAAAAC TACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAA
CATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTGGCAT
CGACAAAAGACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCGTGATTGGATTGCCACATGGCTCACATTGCAT
GCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAAGATGGCCCTAAATTCTTGA
AGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCAC
CTTTGGGTCGCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGG
CTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCAGAAAGCTCAGAAGGCTAAATGA

WO 2004/030615

PCT/US2003/028547

3036/6881
FIGURE 2801

GCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCTGGGCAAGTCCACCACT
ACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAG
ATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGAATTT
GAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATA
ATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
GTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTGTTGCCAAATTCTTGAAGTCTGGTG
ATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTC
GCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTC

WO 2004/030615

PCT/US2003/028547

3037/6881
FIGURE 2802

AAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTT
CTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAAGTCACCCGTA
AGGATGGCAATGCCAGTGAACACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGA
CTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTGCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTTCGTGCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCGTGATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAACCACC
TTTGGGTCGCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGG

WO 2004/030615

PCT/US2003/028547

3038/6881
FIGURE 2803

CTTTTTCGCAACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCCTACTGGCCATCTGATCTAT
AAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTC
AAGTATGCCTGGGTCTTGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGTCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACATAATTGTCGGTGTAAACAAA
ATGGATTCCACTGAGACCATCCAGGCCAAATAAGCGCCGGCTATGCCCTGTATTGGATTGCCACATGGCTCACA
TTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATC

WO 2004/030615

PCT/US2003/028547

3039/6881
FIGURE 2804

CTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTTCGGGCAAGTCC
ACCCTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCT
GCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATC
ACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGA
GACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGT
GAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAA
CACTAATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAACTACA
AAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAACGGAAGTAAATCTGTGCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGG

WO 2004/030615

PCT/US2003/028547

3040/6881
FIGURE 2805

MGKEKTHINIVVIGHVDSGKSTTTGHLIYKCSSIDKRTIEKFEKETAEMGKGSFKYGWLDKLKAERERGITIDI
SLWKFETSKYYVTITDAPGHRDFIKNMITGTSQADCAVPIVAAGVGEFEAGISKNGQTREHALLAYTLGVKQLIV
GVNKMDSTEPYPYSQKRYEEIVKLVLVVFLLAEWRLVFSNPVWWSPLLQSTLQOK

WO 2004/030615

PCT/US2003/028547

3041/6881
FIGURE 2806

ATGGCCCAACAAGCAAATGTCGGGGAGCTTCTTGCCATGCTGGACTCCCCCATGCTGGGTGTGCGGGACGACGTG
ACAGCTGTCTTTAAAGAGAACCTCAATTCTGACCGTGGCCCTATGCTTGTAACACCTTGGTGGATTATTACCTG
GAAACCAGCTCTCAGCCGGCATTGCACATCCTGACCACCTTGCAAGAGCCACATGACAAGCACCTCTTGGACAGG
ATTAACGAATATGTGGGCAAAGCGCCACTCGTTTATCCATCCTCTCGTTACTGGGTGATGTCATAAGACTGCAG
CCATCTTGAAGCATAAGCTCTCTCAAGCACCTCTTTTGCCCTCTTTACTAAAATGTCTCAAGATGGACACTGAC
GTCGTTGTCTCACAACAGGCGTCTTGGTGTGATAACCATGCTACCAATGATTCCACAGTCTGGGAAACAGCAT
CTTCTTGATTTCTTTGACATTTTGGCCGTCTGTCTCATGCTGCTGAAGAAACCAGGCCACGTGGCGGAAGTC
TATCTCGTCCATCTCCATGCCAGTGTGTACGCACTCTTTCATCGCCTTTATGGAATGTACCCTTGCAACTTCGTC
TCCTTTTGTGCTTCTCATTACAGTATGAAAGAAAACCTGGAGACTTTTGAAGAAGTGGTCAAGCCAATGATGGAG
CATGTGCGAATTCATCCGGAATTAGTGACTGGATCCAAGGACCATGAACTGGACCCTCGAAGGTGGAAGAGATTA
GAAACTCATGATGTTGTGATCGAGTGTGCCAAATCTCTGATGCCACAGAAGCCTCATATGAAGATGGCTAT
TCTGTGTCTACCAAATCTCAGCCCGCTTCTCTCATCGTTCAGCCGATGTCACCACCAGCCCTTATGCTGACACA
CAGAATAGCTATGGGTGTGCTACTTCTACCCCTTACTCCACGTCTCGGCTGATGTTGTTAAATATGCCAGGGCAG
CTACCTCAGACTCTGAGTTCCCCATCGACACGGGTGATAACTGAACCACCACAAGCTACTCTTTGGAGCCCCATCT
ATGGTTTGTGGTATGACCACTCCTCCAATCTCTCTGGAATGTCCACCTGATCTGTACACCCCTTACAGTAAA
GTCTTTGGTACAACCTGCAGGTGGAAGGAACCTCTCTGGGAACCCAGCAACCTCTCTCTCCAGCCCCACTC
TGTCATTCCGATGACTACGTGCACATTTCACTCCCCAGGCCACAGTCACACCCCCAGGAAGGAAGAGAGAATG
GATTCTGCAAGACCATGTCTACACAGACAACACCATCTTCTGAATGACAGAGGATCAGAAGAGCCACCTGGCAGC
AAAGGTTCTGTCACTCTAAGTGATCTTCCAGGGTTTTTAGGTGATCTGGCCTCTGAAGAAGATAGTATTGAAAAA
GATAAGAAGAAGCTGCAATATCTAGAGAACTTTCTGAGATCACCACAGCAGAGGCAGAGCCTGTGGTTCTCTCGA
GGAGGCTTTGACTCTCCCTTTTACCGAGACAGTCTCCAGGTTCTCAGCGGAAGACCCACTCGGCAGCCTCCAGT
TCTCAGGGCGCCAGCGTGAACCCTGAGCCTTTACACTCCTCCCTGGACAAGCTTGGGCTGACACACCAAAGCAA
GCCTTTACTCCCATAGACCTGCCCTGCGGCAGTGTGATGAAAGCCCTGCGGGAGACAGGGAATGCCAGACTTCT
TTGGAGACCAGTATCTTCACTCCCAGTCCTTGTAATAATCCACCTCCGACGAGAGTGGGCTTTGGAAGCGGGCAG
CCTCCCCCGTATGATCATCTTTTTGAGGTGGCATTGCCAAAGACAGCCCATCATTGTGTCATCAGGAAGACTGAG
GAGCTGTTAAAGAAAGCAAAGGAACACAGAGGAAGATGGTGTGCCCTCTACCTCCCCAATGGAAGTGCTGGAC
AGACTGATACAGCAGGGAGCAGACGCGCACAGCAAGGAGCTGAACAAGTTGCCTTTACCCAGCAAGTCTGTGCGAC
TGGACCCACTTTGGAGGCTCTCCTCCTTCAGATGAGATCCGCACCCCTCCGAGACCAGTTGCTTTTACTGCACAAC
CAGTTACTCTATGAGCGTTTTAAGAGGCAGCAGCATGCCCTCCGGAACAGGCGGCTCCTCCGCAAGGTGATCAAA
GCAGCAGCTCTGGAGGAACATAATGCTGCCATGAAAGATCAGTTGAAGTTACAAGAGAAGGACATCCAGATGTGG
AAGGTTAGTCTGCAGAAAGAACAAGCTAGATACAATCAGCTCCAGGAGCAGCGTGACACTATGGTAACCAAGCTC
CACAGCCAGATCAGACAGCTGCAGCATGACCGAGAGGAATTCTACAACCAGAGCCAGGAATTACAGACGAAGCTG
GAGGACTGCAGGAACATGATTGCGGAGCTGCGGATAGAAGTGAAGAAGGCCAACAAAGGTGTGTCACTGAG
CTGCTGCTCAGTCAGGTTTCCCAAAAGCTCTCAAACAGTGAGTCGGTCCAGCAGCAGATGGAGTTCTTGAACAGG
CAGCTGTTGGTTCTTGGGGAGGTCAACGAGCTCTATTGGAACAACTGCAGAACAAAGCACTCAGATACCACAAAG
GAAGTAGAAATGATGAAAGCCGCCTATCGGAAAGAGCTAGAAAAAACAGAAGCCATGTTCTCCAGCAGACTCAG
AGGCTTGATACCTCCCAAAAACGGATTTTGGAACTGGAATCTCACCTGGCCAAGAAAGACCACCTTCTTTTGGAA
CAGAAGAAATATCTAGAGGATGTCAAACCTCCAGGCAAGAGGACAGCTGCAGGCCGAGAGAGCAGGTATGAGGCT
CAGAAAAGGATAACCCAGGTGTTTGAATTGGAGATCTTAGATTATATGGCAGGTTGGAGAAAGATGGCCTCCTG
AAAAAAGTTGAAGAAGAAAAGCAGAAGCAGCTGAAGCAGCAGAAGAAAGGCTTGACTGTTGTAATGACGGGTGC
TCAGATTCCATGGTAGGGCACAATGAAGAGGCATCTGGCCACAACGGTGAGACCAAGACCCCCAGGCCAGCAGC
GCCCCGGGGCAGTAGTGGAAGCAGAGGTGGTGGAGGCAGCAGCAGCAGCAGCAGCGAGCTTCTACCCAGAGAAA
CCCCACACCAGAGGGCAGGCCCATTCAGCAGTCGGTGGGAGACGACTATGGGAGAAGCGTCTGCCAGCATCCCC
ACCACTGTGGGCTCACTTCCCAGTTCAAAAAGCTTCTGGGTATGAAGGCTCGAGAGTTATTTCTGTAATAAGAGC
GAGAGCCAGTGTGATGAGGACGGCATGACCAGTAGCCTTCTGAGAGCCTAAAGACAGAAGTGGGCAAAGACTTG
GGTGTGGAAGCCAAGATTCCCCTGAACCTAGATGGCCTCACCCGCTCTCCCCGACCCCGGACAGTGTGGACAG
CTACATATCATGGACTACAATGAGACTCATCATGAACACAGCT**TAA**

WO 2004/030615

PCT/US2003/028547

3042/6881
FIGURE 2807

MAQQANVGELLAMLDS PMLGVRDDVTAVFKENLNSDRGPM LVNTLV DYYLETSSQPALHILTTLQEPHDKHLLDR
INEYVGKAATRLSILSLLGHVIRLQPSWKHKLSQAPLLPSLLKCLKMDTDVVVLTTGVLVLITMLPMIPQSGKQH
LLDFFDIFGRLLSWCLKKPGHVAEVYLVHLHASVYALFHRLYGMYPCNFVSFLRSHYSMKENLETFEEVVKPMME
HVRIHPELVTGSKDHELDPRRWKRLETHDVVIECAKISLDPT EASYEDGYSVSHQISARFPHRSADVTTSPYADT
QNSYGCATSTPYSTRMLMLNMPGQLPQTLSSPSTRLITEPPQATLWSPSMVCGMTTPPTSPGNVPPDL SHPYSK
VFGTTAGGKGTPLGTPATSPPPAPLCHSDDYVHISLPQATVTPPRKEERMDSARPCLHRQHHLNDRGSEEPGGS
KGSVTLSDLPGLGLDLASEEDSIEKDKEEAAISRELSEITTAEAEPVVPRGGFDS PFYRDSLPGSQRKTHSAASS
SQGASVNPEPLHSSLDKLGPDTPKQAFTPIDLPCGSADESPAGDRECQTSLETSI FTSPCKIPPTRVGFGSGQ
PPPYDHLFEVALPKTAHHFVIRKTEELLKKAKGNTEEDGVPSTSPMEVLDRLIQGADAHSKELNKLPLPSKSVD
WTHFGGSPPSDEIRTLRDQLLLHNQLLYERFKRQQHALNRRLLRKVIKAAALEEHNAAMKDQLKLQEKDIQMW
KVS LQKEQARYNQLQEQRDTMVTKLHSQIRQLQHDREEFYNQSQELQTKLEDCRNMIAELRIELKKANNKVCHTE
LLLSQVSQKLSNSESVQQQMEFLNRQLLVLGEVNELYLEQLQNKHSDTTKEVEMMKAAAYRKELEKNRSHVLQQTQ
RLDTSQKRILELESHLAKKDHLLEQKKYLEDVKLQARGQLQAAESRYEAQKRITQVFELEILDLYGRLEKDGLL
KKLEEEKAEAAEAAEERLDCCNDGCSDSMVGHNEEASGHNGETKTPRPSSARGSSGSRGGGGSSSSSELSTPEK
PPHQ RAGPFSSRWETTMGEASASIP TTVGSLPSSKSFLGMKARELFRNKSESQCDEDGMTSSLSES LKTEL GKDL
GVEAKIPLNLDGPHPSPTPD SVGQLHIMDYNETHHEHS

WO 2004/030615

PCT/US2003/028547

3043/6881
FIGURE 2808

GCTCCGGTTGCCTCCGACCTCGGCGCTGGGCGGGCGCGCCGGGCTGGGGAAGGGGCGGGCGGGGACCCGATG
CGCGGGAGCGGAGGCCGAGATGGCTTCGGCGGGAGGCGAAGACTGCGAGAGCCCCGCGCCGGAGGCCGACCGTCC
GCACCAGCGGCCCTTCTGATAGGGGTGAGCGGCGGCACTGCCAGCGGGAAGTCGACCGTGTGTGAGAAGATCAT
GGAGTTGCTGGGACAGAACGAGGTGGAACAGCGGCGGCAAGGTGGTCATCCTGAGCCAGGACAGGTTCTACAA
GGTCCTGACGGCAGAGCAGAAGGCCAAGGCCCTTGAAGGACAGTACAATTTTGACCATCCAGATGCCTTTGATAA
TGATTTGATGCACAGGACTCTGAAGAATCTGTTGAGGGGCAAAACGGTGGAGGTGCCGACCTATGATTTTGTGAC
ACACTCAAGGTTACCAGAGACCACGGTGGTCTACCCTGCGGACGTGGTTCTGTTTGAGGGCATCTTGGTGTCTA
CAGCCAGGAGATCCGGGACATGTTCCACCTGCGCCTCTTCGTGGACACCGACTCCGACGTGAGGTGTCTCGAAG
AGTTCTCCGGGACGTGCGCCGAGGGAGGGACCTGGAGCAGATTCTGACGCAGTACACCACCTTCGTGAAGCCGGC
CTTCGAGGAGTTCTGCCTGCCGACAAAGAAGTATGCCGATGTGATCATCCCGCAGGAGTGACAAATATGGTTGC
CATCAACCTGATCGTGCAGCACATCCAGGACATTCTGAATGGTGACATCTGCAAATGGCACCGAGGAGGGTCCAA
TGGGCGGAGCTACAAGCGGACCTTTTCTGAGCCAGGGGACCACCTGGGATGCTGACCTCTGGCAAACGGTCA
TTTGGAGTCCAGCAGACAGCCCCACTGAGGGGCTGCCGAGCCTCAGGGCAGGTCTCCCGCCCGGCATGTGTGTT
AGGGACTGAGCCTGGGGACGCCCCACCCACACCCACTGCTTCCTCTCGGCGCACCCAGGGGAGTGTTAGCAGCGA
GGCCTTCCTCACTCAGGAGTGGAACCTCAGATGTGTCACTCAGACTCAACTTGCTGGGACACTGACAGGCGTTCC
TGAGGTTTTAGCCACTTAGGCTCGTTGCGGTTTTAAAGATCCCTCTAGGTCACTGAGAAATGCCACAGAATGTGC
AGGAAGCCTGGGAGGCTTCTGTGAGGAATGTGAGGCACATTATGGGGAAATTGAGGAGACAGCCTAGACACTGG
CTGGCCTGATGTTTTGTTGACAGTGAACCCACAGTGGGAGAGAGTTTTTCCAGTCTGATCTGGTTCTTACACAC
TCACACACATAACTCAAAGTTTTGTGAACAAGTACTTTCCTTTTTTACATGTTACATGTCTCATGTTTTCTGT
TTTTGTTTTATAACACAAGGCTGGTTGTGGCCTACAAACCTAATTTATGACCCAGTGGTTTGCAGTCCAGCGT
GGCCTACACGGATATGGGGAGCCACTGAGGGATGTTTTCCCCCTTGCTTGTGCCTTAAAGGCAGAGAAGCGAGG
CGGATGCCCTGGAAGCACCCAGCATCACACCCAGGCTTGTGCGGGGCCAGGCTGGGAGCCCATGCAGTAGGGCAG
AAGGCAGCGGAGGCCAGGTCTGTCCCGGCTGGAGAACAGCGTCCACGCAGTCCCTGCCCTGGGGTCAGGCCCTCACT
GACCCTCAGGGGAGCCCCAAGGTGCTGTCTGTCTAGACAGGCTGTCCACCCAGGGTGGCTAGTGGCCATATG
CAGGGAATGGTGCTTCTGGCTGTGGCAGCAGTGGATCACCCAGGTCCCAGCAGACATGGCCGCCCCAAAGTCAGC
AAGCCTCCTTTGTGCTATGTGGAGCTCACAGCCTCACATGTGAACACCCGTGTCTGGGTTGCCTGGGGTGATCCT
CCCTCCTGCGTGGTGGCTGTCTCTGGAAGCATCCCTTGCCGCTGCCATGGGCAGCCCCAGCCCCGTCCGTCCA
GGCTCACCCACAGTAGTGATGCAGACGTGACGTGGGGGAAGGGGGCTGAGCCCTGTGGCTGGGTTCTGACAACTG
TAACGGTTTTGTGAGCTTAGGCCCTTTGGAGGGAGAATCAATAAATAACAAACACCAACTAC

WO 2004/030615

PCT/US2003/028547

3044/6881
FIGURE 2809A

TGAACAGGGAGAGGCCATGAAACAGTTTGACCTGAACTATGGAAGTGCCATCATTGAAAATTGCGGGTCCAGCCC
CGGGGAGGAGAGTGAGGTGGGTTCATGGTGGGCGAAGGCTTCATCGAAGTCCTGACCAAGAAGCAGCGCCGCCT
GCTGGAGGAAGAGAGAAGAAAGAGGAGCAGGCCGTGCAGGTGCCTGTCAAAGGTCGAGGCCTTTCTCCCGTAT
TCCTCCTCGATTTGCAAAAAAGCAGAACAACTTATGTCTGGAGCAAGGTGACGTGACCGTGCTGGCAGCAGCCT
GGGCACTGAGATCTGGGAGAGCAGCAGCCAGGCTCTCCCTGTGCAGGCCCCAGCCAACGACTCCTGGAGGAAAGC
TGTCAGTGCCTTCAGCAGCACCAGACTGGCTCTGCGGAGCAGGGTTTTAAGAGCAGCCAGGGAGATAGTGGCGT
TGACTTGAGTGCCGAGTCTCGGGAGTCGTCTGCGACCTCCTCGCAGCGCAGCTCCCCATATGGGACTCTGAAGCC
AGAGGAGATGAGCGGGCCCCGGCTGGCGGAACCCAAGGCCGACAGCCACAAGGAGCAGGCTCCAAAGCCATCTGA
GCAGAAGGATTCAGAACAAGGCTCTGGACAGAGCAAGGAGCACAGACCAGGACCCATCGGCAACGAGCGTTCTCT
GAAAAACAGAAAGGGCTCGGAGGGGGCCGAGCGGCTGCAAGGGGCTGTCTCCCGCTGTAAACGGGGTGGAGAT
TCACGTGGACTCCGTGCTGCTGTGCCACCCATTGAATTTGGAGTCAGTCCAAAGACTCCGATTTAGCTTGCC
ACCTGGTTCTGCTCTGGTCTACTGGGAGTCCAGTTGTTAAACTTCAGGATGCCTTGGCCAGTAATGCAGGGTT
AACACAGAGTATCCCCATCCTGCGGCGGGACCATCACATCCAGAGGGCCATCGGTCTCTCCCCAATGTCCTTCCC
CACCGCCGACCTTACTCTGAAGATGGAGTCTGCGCGCAAGGCTTGGGAAAACCCCCAGTTTGCCGGAGCAGAG
CTCTCCAGGCGGGCTGGCTCAGGCATCCAGCCTCCATCCTCTGTGGGTGCCTCCAGCGGGGTCAACTACAGCTC
CTTCGGTGGAGTGTCATGCCACCCATGCCTGTGGCTCTGTAGCACCTTCTGCTTCTATGCCAGGCAGCCACCT
CCCCCCCCCTGTACCTGGATGGCCATGTGTTTGCAAGTCAGCCCCGGCTGGTTTCTCAAACGATACCTCAGCAGCA
GAGTTACCAACAGGCCGCCGCTGCCAGCAGATCCCGATCTCCCTTACACATCTCTGCAGGCACAAGCTCAGCT
TGGACTGAGGGGTGGGCTTCTGTGTCCCAGTCCCAGGAGATCTTCAGCTCCTTGCAGCCCTTCAGATCTCAGGT
GTACATGCACCCCAGCCTGTACCCGCCAGCACCATGATCCTCTCTGGGGGCACAGCCTTGAAGCCTCCATACTC
GGCGTTCCCAGGCATGCAGCCCTTGGAGATGGTGAAGCCGAGTCTGGCTCACCCCTACCAGCCCATGAGCGGGAA
CCAAGCCCTGGTCTACGAGGGGCCAGCTCAGCCAGGCTGCTGGCCTGGGTGCCTCCCAGATGTTGGACTCCCAGCT
CCCACAGCTGACCATGCCACTGCCTCGGTACGGCTCCGGGCAGCAGCCACTGATCCTGCCCCAGTCTATTAGCT
GCCACCTGGGCAGAGCCTCTCCGTTGGGGCCCCCGAAGGATTCTCCGCCCGGGTCCCAGCCGCCAGTCTTGAA
CACCAGCAGAGAGCCCTCTCAGATGGAGATGAAAGGCTTCCACTTTGCCGACAGTAAACAGAATGTCCCTTCAGG
AGGCCCCGTGCCATCGCCACAGACCTACAGGCCTAGCTCTGCTAGCCCCAGTGGGAAGCCCTCTGGATCAGCAGT
TAACATGGGCTCTGTGCAGGGACACTACGTGCAACAGGCAAAACAACGAGTGGATGAGAAACCCAGCCTGGGAGC
CGTGAAGCTGCAGGAGGCCCCCTCGGCTGCCTCCCAGATGAAGCGAACCAGGAGCGATCAAGCCTCGGGCTGTCAA
AGTGGAGGAGAGTAAGGCCTGACAGTGCCTGGCTGCCACCTCGCCTCTCCCTACTGAGGACGGTGCCGCCATGCG
GCCTCGACACAGCCGACACTCGGGAGCCTCACCAGATCCACCGTCCAAATGCGTGGGCCAGACTGAGAGACCTCC
CTCCTCTCCACTCCCGAAAGCTCCGTTGTCAACCAGCTTGACCCGTTGGATATATGGCATTGACCCGCTTGCTTT
GATACGAAACAAAAAGCAGACGACTCCTTATCCCATCTGCTCCTACCGTGACTGTGGAGTGACGCCCTCCTGTG
CAGTGCAGATTTGCCCTCCCTGCCTCCTCCTGTCTGCGCGCAGCCAGGGCGCCTTCTCAGCAGTGCTTCCGG
CCCAGCCGCCCATCCCTAGGCACAGTGATTTGGCAGCAGGGTCATTTTACTTTGAGGCTTTTTGTTTTAAATGT
AGCCAAGGTTTTTACAAAGGGGAAAGGAAAAGAAAACAAAACGCAAGCTCCATGTGTATAGCTGAACTTTTATA
TGTTTTCTTGCCAGCCCCCTCCGCTCCCTTCCATCTCTAGCCTCTGTCTGTTTAGTTTGATACGTCACTGCAGTAC
CTTAAGAGGTGACTCTTAAGAATGCATCCCTCCTGATTCTCAGCTGGTTCACCCCTGAGGTTATTGCAAAAA
GAAAAGGAGGTTCTTGAGGGCACCAGATTGCGAGCATTCTGGTGCCTGGCTCCCCGCTGGGAAGCGATGGGGTGC
TCAGAGCAGCAGGCAGGTTGGGGGAGGGGGGGGTCATAGTTGGGTTCAGCTCCTGGCTTGATGAGCCCAGGGC
GCTTACAGGCAGGCCATGAAGTTGATGACAGTTTTAGCATGAGAATCACACAGGGTCCCTGTCTGGGCTCCTCT
AAAGCCAGTGGATGTGCTGGGCACCAGAGACAAATCATGGAGATGGCTGTGTTGGTGGCTCCCAGGTTGGCCAGAT
GGGGTGAGCTGACATACCACAGGCCCATCCAGGCCCGTGGGCTCTGCTTCTGGGGCTCCATACCCTGCCCTGC
AGGGGTGCTGTGTTTTTACACATTTCTTTCCCTGAAGCCTTCTGTAACCTGTCATTTTCTTCTCTCTCTTCC
GGAGCCTGCTGCTTTCTCTGGACCTGTCTCCACCTCCACACAGCTCATCGTGAACACCACCTTGGTGATGGAGGG
AGTGGACCCGTGTGTGGTCCCCAAGTGAGGCCACTGGGAGTTTGTCTTCTCTCTCTCTCTCTCTCTCTCTCTCT
CAGACCCAGGTTGTGAGGACAGGAGGGCTGAGCTAAGCAGTTAGGCATCAGTCTCGTTTGTCTTTCAGACGGCGGG
GGCAGGTCCAGGGTGAGGCTGGGTGGAGGGCTGACCAAGTCCAAAGGGCCTGCGCAGCCTCCGGGAGGGCAGCT
TCTCCAGCCAGAGGCTTGTGTGAGCCATCGTGTGCTGGGCTGTGTTTTTAAGTAAGAAACAAGGAAATCACTCCAG

WO 2004/030615

PCT/US2003/028547

3045/6881
FIGURE 2809B

ATTCTGTCATTCCAAGGAAAGGGAAGGGGACAGTTCAGGTTTCTCAGCTGTTCTTAGGGGTCAGTGAAGCTCTAC
CTCCTCCTCCAGAGGAGGCTGGCTCAGAACACCTAGAGGAGGGGGCCGGGGATGCACCCCCACCAGAGGCTGCC
TTCAGCGTCTCACGGGTGCAGGACAGCGCTCAGGCTTGGGCTCTAAGCTCTGTGTCTAGTGTAGAACATGGGGAA
GGAGCATCTTAGGAACTGCTGAAGTAACCTCTTACTGCTCTCACAATTCTAAGGAAGCGGGAGAACGGCCTCCTA
CCAACAGCGCCCCACCCAGAGCTGCCTGGGAAAGGGCAGTTTTACTGAAAGGTGCTTTACTGTTTACCTGCATCT
TTCAGCAGCTCCCCCTCCTGCCCTCACCTGGTCTTTTCCCTCTTTATCCCAAGCCTTTATGCTTGAGTCCCTTCCC
CAGGGGCTGCCACCCGACAGTTCAGGCATTCCCTACCTGAGCTTCTTGCTGCTTTTCTTCTCCCACTGCAA
GCGGCTGCTTGTGGGGCTGGGATGAGCCCTCTCTGTCCCCACCGGCCCTCCTTGCCAAGCCATTCTGGGTGAG
TTCAGGCCTGCGGGAGCCACACATTCACTCTCCACCTGGACACTTGAGCCGCATGGCCAGACCCCTCCACCTGAT
GCGGTGGTGCGTGTGATTTGTCAAAAGAAAGCCTTCTGGATGCTGTTAAGATGTACCCTTCAGGTGAACCTGGTA
TCAGACCCACAGTACTTGTCTGTTTGTAGAAAAAATAAAAAACAAAAAGGTACCTGTTCTCCAGCCCTTTTCTCTTA
CCTGGTATTTCTTCTTCTTCTCTCCCCACCCCAATAAAAAACAAAAACACTAGAAATTTATTTATATGTAT
TGATGTTGTAGGTCTAGGTGAAAAAAGAAAGTAAATGTTTCACTGCTCTATTTATATATAATGTCTGAATTAA
TTCTGTGCAGGAAAGGCCAGGAAATTGCATGTGAAGTTCGGTGCAGTACCACCTGTGTGTGACCTGAGCTGCAG
TCTCTTCGCTGAGATGCAGGTTTTAAATGAGACTTGGGGGGCTGAGGGCAGGCCTCAGGCCTCCAGCGCCCCAA
CCCCTCCTTGGTCTAATGAAATGCAGTTCTTAGTGAGAGATGTTTTAAGGTGCAATATATCTCTTCTTCCCCG
TGGTTTTAGAGCCAAGCTCAAGGTAGTAGGACGTAGGGTCTTATTTTGTTTTCAAACCCCATCCTCAGAGCGCA
GATACATGCAGAGGCTTCTGCCAGGATACACGGGGCCTTAGTGGGAACAGGTGGAGACCAGCACTTCCCTTTCC
TGCTGCTGAGGTAGGGATTGGGGGGTCAGAACCCACTCACTTTTGCTGTAAAGTTGCCCTCCTGACGCTGGCA
GCTCTGCCTTGGTCACTGGGGATGCGGCTCGTTGCTCAGCCACCAGTGGCCTTGCGGTATTGTCCACCATCCACT
AGAGTGGGATGAAGTCCAGAGTGTGGGTATACATCTCAGATGCCATCTACCCACTGGGGACTTCAATGCCAGCT
GCATTTGGTTTGGTTTTCTTAAGTGTGGCTTCTCCCCACAGCGTTTTTGTTTTTTTTAAACATTCAATTTGT
TTTCAAACCTTGAATTCATAGACACTCTGGCTCTAGGTTCCTTAAGGGGGAAAACAAAAGATGACTTTATTTTAC
ATTCAAGAAAATCAGTTCAGTTCCAAAGCTGTGGTCTTCCAGCCACTTCTAGGGACACTGGGGAACTTGTAA
ACGTTGACATCAGTGTCTCTCAGCCGTGCTGTACCCCTCCTATCTTCTGGATCTGCCTTCGCGATGGTCAGTGAC
AGCTTCTGGAAGCTGAGCACACACAGGTGCACAGCCATGCTGTGGTCTGGCCTGCTACGGCAGCATGGCAGCTCT
GGTGGAGCCTTCTCCCTTGCCATTTGGTTCCCTGTGCCAAGTAGCTGCAGGCTGCCCTCAAATCTTCATTTGT
CCCTTTTCACTTCTTGCAGAACAAAGCCTGGGTTAGAGGGTCTGCTGGAAATGGCCTTTGAAGACCAAGGATACCA
GGATGTGTGCACTCTGTCTGTCTGTGATGAATGGGAAACGTAGGCTTCCAGAAAGCCAGCTCTCTTCTGAAAT
GTGACGGACCTAAGCAGGAAGTCATCCAGGACAGGAGTGGCTCAGTGTGGGGATGGACGCTGTGCCCCAGCCAT
GCTCCACCAGGGCCACCAATGTGTAGTGGCTGGTGGTCTTCGGGCATGTGAGACCTGCTCTTCACTGTTCCAC
CCCCTTGGTGGCCTCCAGGATGGTAGTGGCACCCCTCAGAGCCCATCTTCAGCATGTTCTGAAGCCTCAGAGTG
GAAATTCCTGCTAAGGCTCTGTGTGGACGCCTTTCTCCGTGATCTAAAGGGGACACTGTACTCAAGCTTTTGAC
CTCATGCCTTGTGTAGTAAAAAGGATTTGGGGGTTTTGTTTGGTTCCTGAGAGGGTTGTGTTTTGTTTTGTTT
CCTTTTGTGTTTGTGTTTTGGCCTTTCTCTTTTGTCTTTTCCATGTAGACCAGATATTTGAAAGGGCAGACGATGGCT
AGAGGTGTAATGTGCAGCTTGTATATACGGTATTTTGGGAACTTACCTTGGATGGGAAATCGAATCGTGGATT
ACCAGGCCGGTGTGGCACACTCACCTCGCCCTTTCCCTCCGGTTCAGTACCTATTGTTTCTCCTTTCAAATAT
GTGATTGTACTAGCTCTTTCATATGAAAGAATTCTCCTTATTTAAATAAAAAAGTTTAAAAAGAT

WO 2004/030615

PCT/US2003/028547

3046/6881
FIGURE 2810

MKQFDLNYGSIIENCGSSPGEESEVGSVMGEGFIEVLTKKQRRLLLEEERRKKEQAVQVPVKGRGLSSRIPPRFA
KKQNNLCLEQGDVTVPGSSLGTEIWESSSQALPVQAPANDSWRKAVTAFSSSTETGSAEQGFKSSQGD SGVDLSAE
SRESSATSSQRSSPYGTLKPEEMSGPGLAEPKADSHKEQAPKPSEQKDSEQSGQSKEHRPGPIGNERSLKNRKG
SEGAERLQGAVVPPVNGVEIHVDSVLPVPPIEFGVSPKDSDFSLPPGSASGPTGSPVVKLQDALASNAGLTQSIP
ILRRDHHIQRAIGLSPMSFPTADLTLMESARKAWENSPSLPEQSSPGGAGSGIQPPSSVGASSGVNYSSFGGVS
MPPMPVASVAP SASMPGSHLPPLYLDGHVFASQPRLPQTIPQQQSYQAAAAQQIPISLHTSLQAQAQLGLRGG
LPVSQSQEIFSSLPFRSQVYMHPSLSPSTMILSGGTALKPPYSAFPGMQPLEMVKPQSGSPYQPMMSGNQALVY
EGQLSQAAGLGASQMLDSQLPQLTMPLPRYGSGQQPLILPQSIQLPPGQSLSVGAPRRIPPPGSQPPVLNTSREP
SQMEMKGFHFADSKQNVPSGGPVPSPQTYRPSASPSGKPSGSAVNMGSVQGHYVQQAQQRVDEKPSLGAVKLQE
APSAASQMKRTGAIKPRAVKVEESKA

WO 2004/030615

PCT/US2003/028547

3047/6881
FIGURE 2811

CTCACCTCCCGGAGGCTCTGCTGGTGCAGGCCCGCATTGGAGGGCTCGATTGGCTGCCCGGCTGGCACTGACGT
CCCCCTGGAGCTGGGTGGCAGAGGAGATAAACAGCCATGTGCAACTCTCCACACTATATTTAACAGCTGCGGCGG
AGAAGGCAGGGAGGCAGCCACGGTGGCGGCTCTGGGGGCAGCTCTTGCTTCGGGGAGAAGGCCCTTGGAGCCGG
GCTGGCATCGGCCCTTCTCGGGGTGAGCGAGGTACCATGCCAGCTTCCCAGAGCCGGGCGCGTGCCCGGACCGC
AACAACTCTCAACCGGGCTGAGTTCTGTCCCTGAACCCAGCCCCCAAGGGGGGCGCGAGCCCCGCAGCTCG
GGCAGAAAGGCCCTCGGGCCCATCAGCACAGCCCCACCTGCTGGTGACGGGGCCAGAGAGCGACGCCAGTCACAG
CAGCTGCCAGAGGAGGACTGCATGCAGCTGAACCCCTCCTTCAAGGGCATCGCCTTCAACTCCCTGCTGGCCATC
GATATCTGTATGTCCAAGCGGCTGGGGGTGTGCGCTGGCCGGGCGCGCTCTGGGCCAGTGCCCGCTCCATGGTC
AAGCTCATCGGCATCACGGGCCACGGCATCCCCGGATCGGAGGCACCATCCTCTGCCTGGTGAAGAGCAGCACA
CTGGCCGGCCAGGAGGTGCTCATGAATCTGCTCCTGGCCCTGCTCCTGGACATCATGACGGTGGCCGGCGTGCAG
AAGCTCATCAAGCGGCGCGGCCCGTACGAGACGAGCCCCAGCCTCCTGGACTACCTCACCATGGACATCTACGCC
TTCCCGGCCGGGCACGCCAGCCGCGCCGCCATGGTGTCCAAGTTCTTCTCAGCCACCTGGTGTGGCGGTGCC
CTGCGTGTGCTGCTGGTGTCTGGGCCCTCTGCGTGGGCCTGTCCCGCGTGATGATCGGCCGCCACCACGTCACG
GACGTCTCTCCGGCTTTGTATCGGCTACCTCCAGTTCCGTCTGGTGGAGCTGGTCTGGATGCCCTCCAGCACC
TGCCAGATGCTCATCTCTGCCTGGTGAAGCGCCCCGCCGCCACACAAGCCTCTGGGGGCAGGGCTGGCCCTAGA
GAAGGGGCAGGGGTGGCGAGGTGGCGGGCGTGGGTGGAACAGAGCGGCCAGGAGTCAGAGCGGCCACCCCCACC
TCATCTTCCCTCCTGGCTGGAGGCTGGCGAAGCCAGGCCACCCCTCCCGGAGACAAGCGTGTGTTGGCAGTGCCA
GGCCTCTTGCCCTTTGCTTGGACTCCAAGTCTCCTCTCTAGGCAGCCAGGACCCACCCATGGGGACAGCCCTAT
TTAGCTTCTGCTCTGGGAACAGCAAAATCAGGATGGTGGGAGGGGCGAGTCTTGCTTGTCTTTCATCATCA
TGACTGTTGAGTTCTTGGCTGTGCCCATCACGCCACAGCACGACGCTGCCAAAATGCCCCAACCTACTGCCTG
ATGCAGGTGCCATTGCCATTAGCGGTATCGACAGCTTAGGGCAGCACTTTCCAACGGGTGCCCATGGGACACCA
GCCTGCGAGATGCTTTTGGGGGAAAGGGTTTTGTGGTTCAATAACTTTCGGAAGTGCTGCACACTCTGTCCCCA
AGTTGGACATTCACAAAGGCCGTTATTGCCGTAAAGGCTCTGACAAGCCCTATAGAAAAGCTTCTTGCTAAACCT
TCTTTAAGCCATGTTTTCTAACTTATTTGACCACAGAACCCCTTTCTTGGGGAACAGCTATTAACCCCCAAGGA
ATTATTGGTTCCTCAAGTGCGTTTTTGGGAGCTGCTGCCAGAGAGCTAAAGGGCCTGGGGTGTGAGCTGACTCTCC
TCTGGGGAGGCCGGGTGCACACGCCACAGCCCAGGAAAGTGCTGGCCACCGCCCGTGGGCATCGATGAGGCTTT
GGCCCCAGGGGCCGGACTCCGTGTGACCTAATAGGTCGTTTCCAAGTCACCCGTTTTTGGATGTGCATTTTCATGT
GACAATACAGATGACATGCAAATGG

WO 2004/030615

PCT/US2003/028547

3048/6881
FIGURE 2812

MQLNPSFKGIAFNSELLAIDICMSKRLGVCAGRAASWASARSMVKLIGITGHGIPWIGGTILCLVKSSTLAGQEV
MNLALLLLDIMTVAGVQKLIKRRGPYETSPSLDYLTDIYAFFAGHASRAAMVSKFFLSHLVLAVPLRVLLVL
WALCVGLSRVMIGRHHVTDVLSGFVIGYLQFRLVELVWMPSSCQMLISAW

WO 2004/030615

PCT/US2003/028547

3049/6881
FIGURE 2813

GGCCAAGGGATTGCTGCAGCCCTCATCCACCTTCCAAGCACTGGAAACAAACATTGGAGACCAAGGTCTCCAGAA
GCTTCCACTGACTGCTGTTGGCTGCACCAGGCAACAGGGTCTGGCTCTGTACCCAGGCTGGAGTGCAATGGTAT
GATCTCGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGAT
TACAGGTCCAGCTGGGAGCTCCCCGACCTCCAGGAGGGCAAGATCCAAGCCATCAGCGACTCGGATGGGGTGAAC
TACCCCTGGTACGGCAACACCACAGAGACCTGCACCATCGTGGGCCCCACCAAGAGGGACTCCAAGTTCATCATC
AGCATGAATGACAACTTTTACCCCAGCGTCACATGGGCCGTGCCCCTCAGCGAGAGCAACGTGGCCAAGCTCACC
AATATCTACCGGGACCAGAGCTTCACCACCTGGCTGGTGGCCACCAACACCTCCACCAACGACATGATCATCCTG
CAGACGCTGCACTGGCGCATGCAGCTCAGCATCGAGGTGAACCCCAACCGGCCCCCTGGGCCAGCGCGCCCGGCTG
CGGGAGCCCATCGCCCAGGACCAGCCCAAAATCCTGAGCAAGAATGAGCCCATCCCGCCCAGCGCCCTGGTCAAG
CCCAATGCCAACGATGCCCAGGTCCTCATGTGGCGGCCCAAGTACGGGCAGCCGCTGGTGGTGATCCCGCCCAAG
CACCGGTGACAGCCAGGACCACCCGCTAGGTTAGACTCACAATAATA

WO 2004/030615

PCT/US2003/028547

3050/6881
FIGURE 2814

MNDNFYPSVTWAVPVSESNVAKLTNIYRDQSFTTWLVATNTSTNDMIILQTLHWRMQLSIEVNPNRPLGQRARLR
EPIAQDQPKILSKNEPIPPSALVKPNANDAQVLMWRPKYGQPLVVIPPKHR

WO 2004/030615

PCT/US2003/028547

3051/6881
FIGURE 2815A

GCTTCAGGTCAAATTAGGGCTTTGGGTCAAATCAGGGCTACCTGGTCTGGGAGAGGCACACTTCTAACTGCTGAT
GCCACCCTCAAAGGGTCTCCAGAAGCTTCCACTGACTGCTGTTGGCTGCACCAGGCAGTGAGTATCAGTACATTT
AATCATCACAAAAACCGGGCAGGCAGATGTTGGCGGATTGTCTGTGGGCTGCTGAAGAGCTGGTAGAGCTCAGCG
CGTCTGTGACTGGACCACAGTGCAGTAGCTGGGGCTGACAGTGACCCTGGGCTGCTGCACCCGCTGCAACCCC
CAGGTGGAGGGATCCACGCAGCCTGGTGACGATTGCGCCCTGGCCCTGAGCCATGCCCCGCGTGACGCAGTGCTG
TCTGCCAGCCTGGGAGGCTCCTCACCTGTCTTTGCCTGAGCCAGGGCCTGGGAGTTTCAGGACTGGGAAAGGAAA
GAAAACCCCAAGGCTGGGGTCAGGAAGAGGAGGGCTATTTTGCTGCTCAGTCTGCTCCCCCAAACCAGACCTTC
AGCTCTTTGCAAACGAAAGAGGGGGCAAGGCCAAAGCGGGTTCTTATGCAAGTTTGCTTCTGCCCCTGAAAAA
CCAAAAAACGGAAACTTTTCCAAGCAAGTGAAGCACTGTGTGAGGACAGAGTGGGCGTTTCTTCTGAAATA
GGAGACTAGGCCCCAGTGGGCAAAGAGACCCTGACCCGCTTCTCCATCTGTGCGGGGAATGAATGAGCAGGCT
CACCCTGTTGTATCCTGCGCTGCTGTGTTGGGGCCCCCTAGATCTTAGGAATTGCTGGGTACTTCCGGACAGTG
AGGTTGTCTGAGCTGCCTGCAGGTTCCCTGAGTCTGGGTACTCAGGGGCTGGGCAGGAGATGCCATTAAAGCAGG
TGTTACTCTAATGAGTGAGCTTTTCAATGAGATGAACAGGAAAATTAGCAAAATCATGTTCTTAATCATTCTCTC
TGCGGCGGGCCCCAATTTTGCTAACTGTTAACATTATATGATGCATAAGTAGGGGAATGCATTTTTAAATTATGG
TAAAGCCTATGTAACATTTTATAAAATTGACCATTTATTTATTATTAATTTTTTTTTTTTAAAGACAGGGTCT
GGCTCTGTCAACCAGGCTGGAGTGCAATGGTATGATCTCGGCTCACTGCAACCTCTGCTTCCAGGTTCAAGCGA
TTCTCTGCTCAGCCTCCCGAGTAGCTGGGATTACAGCCTGTGTTGGAACATCCTTCTTCTTAAGGCTGAAGA
ACATTCCATTGTCCAGCTGGGAGCTCCCCGACCTCCAGGAGGGCAAGATCCAAGCCATCAGCGACTCGGATGGGG
TGAATACCCCTGGTACGGCAACACCACAGAGACCTGCACCATCGTGGGCCCCACCAAGAGGGACTCCAAGTTCA
TCATCAGCATGAATGACAACTTTTACCCAGCGTCACATGGGCCGTGCCCGTCAGCGAGAGCAACGTGGCCAAGC
TCACCAATATCTACCGGGACCAGAGCTTCACCACCTGGCTGGTGGCCACCAACACCTCCACCAACGACATGATCA
TCCTGCAGACGCTGCACTGGCGCATGCAGCTCAGCATCGAGGTGAACCCCAACCGGCCCTGGGCCAGCGCGCCC
GGCTGCGGGAGCCCATCGCCAGGACCAGCCCCAAATCCTGAGCAAGAATGAGCCCATCCCGCCAGCGCCCTGG
TCAAGCCCAATGCCAACGATGCCCAGGTCTCATGTGGCGGCCAAGTACGGGCAGCCGCTGGTGGTGATCCCGC
CCAAGCACCGGTGACAGCCAGGACCACCCGCTAGGTTAGACTCACAAATAATAATACCGCTGAAAAACAAACTCA
GACTCACTCTTCAGTCATTACAGCAAGATACAACCATTTACCCCTCTCCAGCGGGCGGATCTCACTGTGCTGATGC
CCCCGGGAAGGCCTCCCCGGCTCTCGGCACCTGCTTCCTTTTCAAGGAGAGGGGAGATCTAAGCAGGACAGACAGA
CCCCACGTGCGCCCTCAGGGTGACCTCTGGTCTCCTTGCCCTCTCCTTTTTCTCAGTTTCAGTCGCTCACTTGTA
CAGATTCCCTGAAACACTGCTTTTTCCGTTTTTAAAAAACTCCTCTTTTGGGGGCTCAGGGGCAGGAGGAGG
GGAGCTGATTAGGAGGGAAGCTCCAGCCCCGATCAAAGAGACAGATCCACACTGCTGCCGATTTGTGGCGCTGG
CCGGCCTTCCCCCAGGTCCCTCCGCCCTCTGTCTATGCGGCCTTATGTAGACTTGCTTTGCCAACTTTTGCTT
AAGCTGAATTGAAAGGAAGAAAACCAATCGGAGAAAGAAAGCAGGATCTCTTTTCTACCGGACTTTTCTCTTCT
GCCAGAGGTGGAGGGAGGGTTGGGGTCGCCCCGCGAGAGTCTCTTGAGCCCTTCTTCCCGGTTGTCTTGGGAGA
GGTGAGGATGGGCATTTAGACCCGAAACCAGCTGCTCACTCTTTCTTTTGGCAGAAATAAAACCACAGGTAGAT
TCTGCCTGAACAGCCCCTTCTCTCCCTCCACCCCAAGGTCGTATCCCTGCACCTGCGGAGAGGGGCTGTGAGCTC
TGGCGGGGGGTGGCTCCACAGTCGCTGGCCTCTTCTCCCTCTCTTCCCAGCAGCCTTAACCTCCCTTGGGCG
GCTCTAGGAGGAGAGAGGCAGGCTCCTGTGAGCCCAGGGAATTTTACCCCTCTCAGTCTCAGGACCCACCCCCA
GTTGAGTCCCTGGCCCTTCTTCCAGGTGTGTGGCTTTTTCTCTTCTCCATCCACACTGGTCCCAATGCCTGGGG
CCGGCCACCTGGACCGCCGACACAGCCTCAATGTTAGTCTCAAAGGTAAGGAAGGCATTACGTCCCTTCTTG
CAGGGCATTTTAAGACTTGAATCGGGTGGGCCCCGGCCCCCTGTGGCTGGCTGGCCCCCTGGTGTACTGTAAAAGG
CCAAGACAGGGCTCGTTCTCAGGGGCGCCCCCTCCAGGCCCTCAGGGCAGCGGGACGGTGCAGTCAGGCTCTGGG
TGCCACAGTGATGGAGGTGGAAGGCACCAAGCTCTAGGGAAGTCTTGGGAGGCAGTCGGCCGAGCCCCCTGCTT
CTGTCTCAATAAGTGAATCCAGGCCAAGGGCTGGGAGGGCTGGGTGGGCTTATCGTCGAGAGGGTTAGAGCC
ACTCTGGAGGCTGGGCTGGCACAGTGAGAGCAACAGGTGAGGACAGACGTCTGGAAGCCCCATCCCTGGGACCTG
CCCTCCCTCGGTCCAGGTCACTGGAGCTCCAGGGCTTACTAGTCTGACCCATTGTGCGAGGGTTCTGAGCAG
TGTGGCCTTGTGGCCACTTGCAGGGGCTATTAGGGGACATCCCGCTGAAGCCACGCTCCTTCCAGCTTGCCAAA
CCCACAGCTACCCGCCCCGGGACCCACACTCAGCCTAATAATTATCAAGCACAGAAAACCGTCCATTTAGAAAAAT
AATCCATTTCTGCTGCAGATGAGCCACTTGTAAAGAGTCTCCGTGACAGCGTGGGACGGTGTGGGAACCAAGTCC

WO 2004/030615

PCT/US2003/028547

3052/6881
FIGURE 2815B

CTGCCCTGCTCCTTTGTCCACGGGCTATTGCGTTTATTCAAGGGGTGCTTAATGACCGTTTAGCCACTGCCGTGCG
GTCTCCGGGGCCAGCTCGTGCCAGGAGGCTGTCTGGGACACACTGGGCTGGAGCTGCCGGCTGGCACGGTGCTC
AGGGGGCCCTGATGGGGGCCAGGACCTCCCCGCAGAACTGCAGGTTCTCTTGAGGATGGAGGCCGTGCCAC
CCCGAAAGGCAGTAGCCTTAGGGGAACAGTGGGTCCCAGCTGCATGTCTGAGGATGGGTGGGGACAGGGCTGGGA
CTCAGCTTTCATTCACTGGAGACTTCTCCACTCAGGTCCTTGTGCACTAAAGCAGGGACAGGACCCTGGGGGTT
CAGGAAGCGGGTCTCAGGCCGCTGGTTTATTCCTGGAGGTGGGGCTGGAGACCAGAATGGAAAGGGGCTTCCTGA
GCTGCTAGGGGGTGAAGGACCCCCGAACCCGCATTCTTGAGTGAGAGCAAACACTCGAGGCAGGAGCCAGCACC
CCTCCCACTGCATGCCCGGCCCCAGCCACCTTGCCCCCTGACCCACCTTCACCCGTGCCCTTCTTTCTGCCC
TTCCTCACCGAAGAAGGGCTAGGAACACCTTGAGAGGCTGCAGGTCCGGCCACGGACGCTCAGCTGAGCCCCGG
TCTGCTCCTTCAGCCTCCTTGCTCATGTTGGAGCACAGGCCCCAGGCTTCCTGCCAGGGCCCCGATTCTTCTTAT
GTCCTCCAGCCCCGCCCTGGCGTGGACATCCACTCACTCCTTCCAGCAATAAGAACCGTCCTTGGTCGTGGAGAG
TACTGTGAAACAAACCAATGCACCTTACCAGGAGGCACAAGACTCTTGAAGAAGATGTACAATGAACCTTTTTTTT
TTTACAAAAAACAAAAAGCAAATATTCATAAAGAGAAATAAAATGTAATTTTAAAGT

WO 2004/030615

PCT/US2003/028547

3053/6881
FIGURE 2816

MNDNFYPSVTWAVPVSESNVAKLTNIYRDQSFTTWLVATNTSTNDMIILQTLHWRMQLSIEVNPNRPLGQRARLR
EPIAQDQPKILSKNEPIPPSALVKPNANDAQVLMWRPKYGQPLVVIPPKHR

WO 2004/030615

PCT/US2003/028547

3054/6881
FIGURE 2817A

AGGGGAGGAAGTTTGCTGTCGAGCGGCCTGGGTTCCTGTTGGGCAAGGCCGTGGGAGGCAGCGTTGGCTGCTTCGAC
ACACTGAGGGCGGCGCGATGGGAGACGAGATGGATGCCATGATTCCCGAGCGGGAGATGAAGGATTTTCAGTTTA
GAGCGCTAAAGAAGGTGAGAATCTTTGACTCCCTGAGGAATTGCCCAAGGAACGCTCGAGTCTGCTTGCTGTGT
CCAACAAATATGGTCTGGTCTTCGCTGGTGGAGCCAGTGGCTTGCAGATTTTCTCTACTAAAAATCTTCTTATTC
AAAATAAACCCGGAGATGATCCCAACAAAATAGTTGATAAAGTCCAAGGCTTGCTAGTTCTCTATGAAATTCCCAA
TCCATCACCTGGCCTTGAGCTGTGATAACCTCACACTCTCTGCGTGCATGATGTCCAGTGAATATGGTTCCATTA
TTGCTTTTTTTTGATGTTTCGCACATTCTCAAAATGAGGCTAAACAGCAAAAACGCCCATTTGCCTATCATAAGCTTT
TGAAAGATGCAGGAGGCATGGTGATTGATATGAAGTGAACCCCACTGTCCCTCCATGGTGGCAGTTTGTCTGG
CTGATGGTAGTATTGCTGTCTCTGCAAGTCACGGAACAGTGAAAGTATGTGCAACTCTTCTCTCCACGGTAGCAG
TAACCTCTGTGTGCTGGAGCCCCAAAGGAAAGCAGCTGGCAGTGGGAAAACAGAATGGAAGTGTGGTCCAGTATC
TTCCTACTTTGCAGGAAAAAAGTCATTCTTGTCTCCGTTTTATGAGTCAGATCATCTGTGAGAGTTCTGG
ATGTGCTGTGGATTGGTACCTACGTCTTCGCCATAGTGTATGCTGCTGCAGATGGGACCCTGGAACGTCTCCAG
ATGTGGTGTATGGCTCTACTACCGAAAAAAGAAGAAAGCAGCCAGAGATATTTGTGAAGTTTATGGAGCCCTGTT
ATGGCAGCTGCACGGAGAGACAGCATCATTACTACCTCAGTTACATTGAGGAATGGGATTTAGTGCTGGCAGCAT
CTGCGGCTTCAACAGAAGTTAGTATCCTTGCTCGACAAAGTGATCAGATTAATTGGGAATCTTGGCTACTGGAGG
ATTCTAGTCGAGCTGAATTGCCTGTGACAGACAAGAGTGATGACTCCTTGCCCATGGGAGTTGTGCTAGACTATA
CAAACCAAGTGAAATCACCATCAGTGATGAAAAGACTCTTCTCTGCTCCAGTTCTCATGTTACTTTCAACAG
ATGGTGTGCTTTGTCCATTTTATATGATTAATCAAAATCCTGGGGTTAAGTCTCTCATCAAAACACCAGAGCGAC
TTTCATTAGAAGGAGAGCGACAGCCCAAGTCACCAGGAAGTACTCCCACTACCCCAACCTCCTCTCAAGCCCCAC
AGAACTGGATGCTTCTGCAGCTGCAGCCCCCTGCCTCTCTGCCACCTTCATCACCTGCTGCTCCCATTGCCACTT
TTCTTTTGCTTCTCTGCTGGTGGAGCCCCCACTGTGTTCTCTTTGGTTCTTTCATCTTTGAAGTCATCTGCTACGG
TCACTGGGGAGCCCCCTTCATATTCCAGTGGCTCCGACAGCTCCAAAGCAGCCCCAGGCCCTGGCCCCATCAACCT
TCTCTTTTGTTCCCCCTTCTAAAGCCTCCCTAGCCCCCACCCCTGCAGCGTCTCCTGTGGCTCCATCAGCTGCTT
CATTCTCCTTTGGATCATCTGGTTTTAAGCCTACCCTGGAAAGCACACCAGTGCCAAGTGTGTCTGCTCCAAATA
TAGCAATGAAGCCCTCCTTCCACCCCTCAACCTCTGCTGTCAAAGTCAACCTTAGTGAAAAGTTTACTGCTGCAG
CTACCTCTACTCCTGTAGTAGCTCCCAGAGCGCACCCCCGATGTGCCATTCTCTTCTGCCTCCAAGCCAGCTG
CTTCTGGACCACTCAGCCACCCACACCTCTCTCAGCACCACTAGTTCCGTGCCATTGAAGTCCTCAGTCTTGC
CCTCACCATCAGGACGATCTGCTCAGGGCAGTTCAAGCCAGTGCCCTCAATGGTACAGAAATCAGCCAGGATAA
CCCCTCCAGCGGCAAAGCCAGGCTCTCCCCAGGCAAAGTCACTTACAGCTGTGTTGCAGAAAAGCAGGGACATC
AGTGGAAAGATTAGATCCTGTAATGGCTGGAATTGGGGAGGAGATTGCACACTTTCAGAAGGAGTTGGAAGAGT
TAAAGCCCCGAACCTTCCAAAGCCTGTTTCCAAGTGGGCACCTTCTGAGGAGATGAAGATGCTGCGAACAGAATCAG
ATGACTTGCATACCTTTCTTTTGGAGATTAAAGAGACCACAGAGTCGCTTTCATGGAGATATAAGTAGCCTGAAAA
CAACTTTACTTGAGGGCTTTGCTGGTGTGAGGAAGCCAGAGAACAAATGAAAGAAATCGTGACTCTGGTTATC
TGCATTTGCTTTATAAAAGACCACTGGATCCCAAGAGTGAAGCTCAGCTTCAGGAATTCGGCGCCTTCATCAGT
ATGTGAAATTTGCTGTCCAAGATGTGAATGATGTTCTAGACTTGGAGTGGGATCAGCATCTGGAACAAAAGAAAA
AACAAAGGCACCTGCTTGTGCCAGAGCGAGAGACACTGTTTAACACCCCTAGCCAACAATCGGGAATCATCAACC
AACAGAGGAAGAGGCTGAATCACCTGGTGGATAGTCTTACAGCAGCTCCGCCTTTACAAACAGACTTCCCTGTGGA
GCCTGTCTCGCTGTTCTCTTCCAGAGCAGCATTACAGTTTTGACAGTGACCTGGAAAGCCTGTGCAATGCTT
TGTTGAAAACCAACCATAGAATCTCACACCAAATCCTTGCCCAAAGTACCAGCCAACTGTCCCCATGAAACAGG
CACAACCTGAGAAACTTCTTGGCCAAGAGGAAGACCCACCAAGTGAGATCCACTGCTCCAGCCAGCCTGTCTCGAT
CAGCCTTTCTGTCTCAGAGATATTATGAAGATTTGGATGAAGTCAGCTCAACGTCATCTGTCTCCAGTCTCTGG
AGAGTGAAGATGCACGGACGTCTGTAAAGATGACGAGGCAGTGGTTTCAGGCCCTCGGCACGCCCCCGTGGTTC
GCACCTCTTCCATCCAGCCAGTCTCTTGCCCCATCGAGCACCTTTTGCTAAATCTCACCTGGTTTCATGGTTCTT
CACCTGGTGTGATGGGAACCTTCAAGTGGCTACATCTGCTAGCAAAATTATCTCAAGGGGGCCGATAGCACAAATGC
TTGCCACGAAAACCGTGAAACATGGTGCACCTAGTCTTCCACCCCTCTCAGCCCCGAGGCAGCTGCCGCGAG
CAGCACTCAGGCGGCAGATGGCCAGTCAGGCACCAGCTGTAAACACTTTGACTGAATCAACGTTGAAGAATGTCC
CTCAAGTGGTAAATGTGCAGGAATTGAAGAATAACCTGCAACCCCTTCTACAGCCATGGGTTCTTCAGTGCCCT
ACTCCACAGCCAAAACACCTCACCCAGTGTGACCCAGTGGCTGCTAACCAAGCCAAGCAGGGGTCTCTAATAA

WO 2004/030615

PCT/US2003/028547

3055/6881
FIGURE 2817B

ATTCCCTTAAGCCATCTGGGCCTACACCAGCATCCGGTCAGTTATCATCTGGTGACAAAGCTTCAGGGACAGCCA
AGATAGAAACAGCTGTGACTTCAACCCCATCTGCTTCTGGGCAGTTCAGCAAGCCTTTCTCATTTTCTCCATCAG
GGACTGGCTTTAATTTTGGGATAATCACACCAACACCGTCTTCTAATTTCACTGCTGCACAAGGGGCAACACCCT
CCACTAAAGAGTCAAGCCAGCCGGACGCATTCTCATCTGGTGGGGGAAGCAAACCTTCTTATGAGGCCATTCTG
AAAGCTCACCTCCCTCAGGAATCACATCCGCATCAAACACCACCCAGGAGAACCTGCCGCATCTAGCAGCAGAC
CTGTGGCACCTTCTGGAACGTCTTTCCACCACCTCTAGTAAGCTGGAAACCCACCGTCCAAGCTGGGAGAGC
TTCTGTTTCCAAGTTCTTTGGCTGGAGAGACTCTGGGAAGTTTTTCAGGACTGCGGGTTGGCCAAGCAGATGATT
CTACAAAACCAACCAATAAGGCTTCATCCACAAGCCTAACTAGTACCCAGCCAACCAAGACGTGAGGCGTGCCCT
CAGGGTTTAATTTTACTGCCCCCGGTGTTAGGGAAGCACACGGAGCCCCCTGTGACATCCTCTGCAACCACCA
CCTCAGTAGCACCACCAGCAGCCACCAGCACTTCCTCAACTGCCGTTTTTGGCAGTCTGCCAGTCACCAGTGCAG
GATCCTCTGGGGTCATCAGTTTTGGTGGGACATCTCTAAGTGCTGGCAAGACTAGTTTTTCATTTGGAAGCCAAC
AGACCAATAGCACAGTGCCCCCATCTGCCCCACCACCAACTACAGCTGCCACTCCCCTTCCAACATCATTCCCCA
CATTGTCTATTGGTAGCCTCCTGAGTTCAGCAACTACCCCTCCCTGCCTATGTCCGCTGGCAGAAGCACAGAAG
AGGCCACTTCATCAGCTTTGCCTGAGAAGCCAGGTGACAGTGAGGTCTCAGCATCAGCAGCCTCACTTCTAGAGG
AGCAACAGTCAGCCAGCTTCCCCAGGCTCCTCCGAAACTTCTGACTCTGTTAAAAAAGAACCTGTTCTTGCCC
AGCCTGCAGTCAGCAACTCTGGCACTGCAGCATCTAGTACTAGTCTTGTAGCACTTCTGCAGAGGCTACCCAG
CCACCACGGGGTCCCTGATGCCAGGACGGAGGCAGTACCACCTGCTTCCTCCTTTTCTGTGCCTGGGCAGACTG
CTGTACAGCAGCTGCTATCTCAAGTGCAGGCCCTGTGGCCGTCGAAACATCAAGTACCCCCATAGCCTCCAGCA
CCAGTCCATTGTTGCTCCCGGCCATCTGCAGAGGCAGCAGCAATTGGTACCGTCACCTTCTGGCTCATCCGTCT
TTGCTCAGCCTCCTGCTGCCAGTTCTAGCTCAGCTTTCAACCAGCTCACCAACAACACAGCCACTGCCCCCTCTG
CCACGCCCGTGTGTTGGGCAAGTGGCAGCCAGCACCGCACCAAGTCTGTTTGGGCAGCAGACTGGTAGCACAGCCA
GCACAGCAGCTGCCACACCACAGGTACAGCAGCTCAGGGTTTAGCAGCCCAGCTTTTGGTACCACAGCCCCAGGGG
TCTTTGGACAGACAACCTTCGGGCAGGCCTCAGTCTTTGGGCAGTCGGCGAGCAGTGCTGCAAGTGTCTTTTCCT
TCAGTCAGCCTGGGTTTCAGTTCCGTGCCTGCCTTCGGTCAGCCTGCTTCCTCCACTCCCACATCCACCAGTGGAA
GTGTCTTTGGTGCCGCCTCAAGTACCAGTAGCTCCAGTTCTTCTCATTTGGACAGTCTTCTCCCAACACAGGAG
GGGGGCTGTTTGGCCAAAGCAACGCTCCTGCTTTTGGGCAGAGTCTGGCTTTGGACAGGGAGGCTCTGTCTTTG
GTGGTACCTCAGCTGCCACCACAACAGCAGCAACCTCTGGGTTTCAGCTTTTGGCAAGCTTCAGGTTTTGGGTCTA
GTAATACTGGTCTGTGTTTGGTCAAGCAGCCAGTACTGGTGGAAATAGTCTTTGGCCAGCAATCATCCTCTTCCA
GTGGTAGCGTGTGTTGGGTCTGGAAACACTGGAAGAGGGGGAGGTTTTCTTCAGTGGCCTTGGAGGAAAACCCAGTC
AGGATGCAGCCAACAAAACCCATTTCAGCTCGGCCAGTGGGGGCTTTGGATCCACAGCTACCTCAAATACCTCTA
ACCTATTTGGAACAGTGGGGCCAAGACATTTGGTGGATTTGCCAGCTCGTCGTTTGGAGAGCAGAAACCCACTG
GCACTTTCAGCTCTGGAGGAGGAAGTGTGGCATCCCAAGGCTTTGGGTTTTCTCTCCAAACAAAACAGGTGGCT
TCGGTGCTGCTCCAGTGTGTTGGCAGCCCTCTACTTTTGGGGGATCCCCTGGGTTTGGAGGGGTGCCAGCATTCTG
GTTTCAGCCCCAGCCTTTACAAGCCCTCTGGGCTCGACGGGAGGCAAGTGTTTCGGAGAGGGCACTGCAGCTGCCA
GCGCAGGAGGATTTCGGGTTTGGGAGCAGCAGCAACACCACATCCTTCGGCACGCTCGCGAGTCAGAATGCCCCCA
CTTTCGGATCACTGTCCCAACAGACTTCTGGTTTTTGGGACCCAGAGTAGCGGATTCTCTGGTTTTGGATCAGGCA
CAGGAGGTCTGTCCAGGGTTTTGGTGGCTGGCGAAGCTGAGGGCGTGTACAGAGGCCTTTCGATCCCTGGGACCA
ACCGCATCCTCAGCTTCTCCCCGAGAAATGCTGGAGCAGGCTGTTTCAGACCGACGTTGCCATCAAAACACATAC
ACCCAGAAAGAAACAACAGAAACCAAACTCACAAGGCGCATGATTACTTGTTTTATATTTTCATGTTGGGTTTTTC
CCTCCCACTATTAAACAGTCTGTTTCCGTAC

WO 2004/030615

PCT/US2003/028547

3056/6881
FIGURE 2818

GCCGGAGCCCCGACCAGGCGCCTGTGCCTCCTCCTCGTCCCTCGCCGCGTCCGCGAAGCCTGGAGCCGGCGGGAG
CCCCGCGCTCGCCATGTTCGGGCGAGCTCAGCAACAGGTTCCAAGGAGGGAAGGCGTTCCGCTTGCTCAAAGCCCG
GCAGGAGAGGAGGCTGGCCGAGATCAACCGGGAGTTTCTGTGTGACCAGAAGTACAGTGATGAAGAGAACCTTCC
AGAAAAGCTCAGACGCTTCAAAGAGAAGTACATGGAGTTTGACCTGAACAATGAAGGCGAGATTGACCTGATGTC
TTTAAAGAGGATGATGGAGAAGCTTGGTGTCCCCAAGACCCACCTGGAGATGAAGAAGATGATCTCAGAGGTGAC
AGGAGGGGTCAGTGACACTATATCCTACCGAGACTTTGTGAACATGATGCTGGGGAAACGGTCGGCTGTCTCAA
GTTAGTCAATGATGTTTGAAGGAAAAAGCCAACGAGAGCAGCCCCAAGCCAGTTGGCCCCCTCCAGAGAGAGACAT
TGCTAGCCTGCCCTGAGGACCCCGCCTGGACTCCCCAGCCTTCCCACCCATACCTCCCTCCCGATCTTGCTGCC
CTTCTTGACACACTGTGATCTCTCTCTCTCTCATTTGTTTGGTCATTGAGGGTTTGTGTTGTTTTTCATCAATGT
CTTTGTAAAGCACAAATTATCTGCCTTAAAGGGGCTCTGGGTCGGGGAATCCTGAGCCTTGGGTCCCCCTCCCTCT
CTTCTTCCCTCCTTCCCCGCTCCCTGTGCAGAAGGGCTGACATCAAACCAAAAAGTACAGAGGGGGCAGGGCCAGGG
CAGGGAGGCTTCCAGCCTGTGTTCCCCCTCACTTGGAGGAACAGCACTCTCCATCCTTTAGAAAGTCTCCAAGC
CAAGTTCAGGCTCACTGACCTGGCTCTGACGAGGACCCAGGCCACTCTGAGAAGACCTTGGAGTAGGGACAAGG
CTGCAGGGCCTCTTTCGGGTTTCCCTTGGACAGTGCCATGGCTCCAGTGCTCTGGTGTACCCAGGACACAGCCAC
TCGGGGCCCCGCTGCCCCAGCTGATCCCCACTCATTCCACACCTCTTCTCATCCTCAGTGATGTGAAGGTGGGAA
GGAAAGGAGCTTGGCATTGGGAGCCCTTCAAGAAGGTACCAGAAGGAACCTCCAGTCCTGCTCTCTGGCCACAC
CTGTGCAGGCAGCTGAGAGGCAGCGTGCAGCCCTACTGTCCCTTACTGGGGCAGCAGAGGGCTTCGGAGGCAGAA
GTGAGGCCTGGGGTTTTGGGGGAAAGGTCAGCTCAGTGCTGTTCACCTTTTAGGGAGGTTACTGAGGGGACCAG
GATGGGAGAATGAGGAGTAAATGCTCACGGCAAAGTCAGCAGCACTGTAAGCCAAGACTGAGAAATACAAGGT
TGCTTGTCTGACCCCAATCTGCTTGAACCTGACTCTGCTTCTCTCATTTGTCTTCTACCTACTCACATAATT
CACTCATTGACTCACTCATTACCAGATATTTATTGACCTGCTATTATAAGCTTTACATCCTCCCATGTTGTCT
GGCATGTGCAGTATACACGGTCTAACTCATCTCTCCCAGATCTCTCAGAACCTTGAGCTTGGGAATTGAACTGG
GGTCACCTGTGTCTTTCTTATGGACTCGCAGGATTTTAGAACCTTAATGCACCTTGAGGGTAGCTGGGCCAGA
CTTCTCATTTTACAGGTGAGGAGACTGGTGCCCCACAGGGATTAAGTGCTTGCCCAAGGTCAGGCTTATCTCCA
GAGGGAGGTGCCCTGGACTGGGGCCCAGATGTTTACGGGACCTGCCTACACCTCATTTCAGTGTTGGGCTGCCTT
AGTTAGTTATGAGAACAGGGAAGGGCTGGGAAGAGACAGCCTCCAAGGTCAACACTTGGAGAGGGTTTCACTTGC
TCTGAAGACCTTGGTCCAGGATTCGCCCTCTCCCATGCCTTCAAGTCAGCATCAGGCTTAGGGCAAAGACCAGGC
CTCTGAAGCTGCCTCTTGTAAATTCATGCAGGAAGATGTCAAAGTCAGCCCCATCTTGGCTGATCAGGGTGTTTCA
CCTTAACCCACCTGTGTTCTGAAGTCTCTTACCCTACCTGCTCAGGACTGAGACAGTTATTCACTGAACATATT
TATTAAGCACTTGCTGTAGGCCAACAGTTAAGAATCCAATAATGAAATGGACAGATTATGGAACCTTAGAGTCCA
ATAGGAAAGTGAGACCCAGACAATGACAATGAGATAAATGTTAGGAAGGGGGAGGTATGGGGTGACTTCCCTGCA
GTCCTGGGGGCTTAGATGGGGCCAAGACTGGGTGAGAGTCTTGGCAGAGCCTTTCGAACACCTTAAGTGGACAGG
ACTGGGAGGTCTTGGTGGTTGGAGCCAACGTTGGGTTCCCTGCGGCTCCTTAGTCACCTCTGATAGCAGATTGAGG
GAGGAAAACAGGTAAGGCATGAGGAAATGGCCAGGTTGGGTTAACCCACTGGTTTCAACCAGTTCAGGAATGAGG
TTATTTGGCCATGACTGGCTGATCTTGAGCTCAAGGATCTGCTTCAAATGCACACAGGCCTAGTTGAAGTTTAAA
CCCCAGCAAAACATTCCCTCCCTGTAAATGGAAAATCCTACTTCTACCCCCACCCTGCCCTGTTTTTTGTTTTTTT
TTTCCCCAAGATCATTAGATGTCTCACCCCTCCTCACTGCCTCTCCTCTCTGGGACAGGCTGGGACCTTTGAGG
AAGATAAAGCCTTCCCTTCACTACCCATCATATTAGTGTCCTGTCTCCTCACTCAGAGAGGAAGGCAGAACCAGT
CAGGCTTATTTAGTAAGTTCCACAGTTCTACAAGACTGCAGGAATTCTCCTTAAGGGAGGAGAGCAAGCAGGTG
TGGCCCCAGCTTCTGGAAATGGCAGAAGAGAGGGTTTTCTCATTGAATGGGGTGGGGGCTCGTGTGTCTTGGGA
AACCCCATCAGTCCCTTCACTTCTTGAGACTCAACTCCTGGGAGGAGAGGGTCTCAAGAGTTGTCCTGGAAGGA
GGGCGGGGGCAGTCTGCATCTATTTAGGTTGTGGCTCTTGGTTCTAGGACTCTTACTTCTCTGGCTAAGGGCTC
AGCTTCTTGGGACTTCAACCATCTTCTTTCTGAAAGACCAATCTAATGTAACAGTAACGTGAGGACTGCCAAG
TATGGCTTTGTCCCTATGACTCAGAGGAGGGTTTTGTCCGGCAAATTCAGGTGGATGAAGTATGTGTGTGCGTGTG
CATGGGAGTGTGCGTGGACTGGGATATCATCTCTACAGCCTGCAAATAAACAGACAAACTT

WO 2004/030615

PCT/US2003/028547

3057/6881
FIGURE 2819A

ATGGGGCAGCAGCCTGGAAAAGTACTTGGGGACCAAGAAGGCCAAGCTTGCCCTGCCCTGCATTTTATCAAAGGA
GCAGGGAAGAAGGAATCATCGAGGCATGGGGGTCCACACTGCAATGTTTTTGTGGAACAAGCCCTTCAGCGGCCA
GTAGCATCTGACTTTGAGCCTCAGGGTCTGAGTGAAGCCGCTCGTTGGAAGTCCAAGGAAAACCTTCTCGCTGGA
CCCAGTGAAGTACCCCAACCTTTTCGTTGCACTGTATGATTTTGTGGCCAGTGGAGATAACACTCTAAGCATA
ACTAAAGGTGAAAAGCTCCGGGTCTTAGGCTATAATCACAATGGGGAATGGTGTGAAGCCCAACCAAAAATGGC
CAAGGCTGGGTCCCAAGCAACTACATCACGCCAGTCAACAGTCTGGAGAAACACTCCTGGTACCATGGGCCTGTG
TCCCGCAATGCCGCTGAGTATCTGCTGAGCAGCGGGATCAATGGCAGCTTCTTGGTGGCTGAGAGTGAGAGCAGT
CCTGGCCAGAGGTCCATCTCGCTGAGATACGAAGGGAGGGTGTACCATTACAGGATCAACACTGCTTCTGATGGC
AAGCTCTACGTCTCCTCCGAGAGCCGCTTCAACACCCTGGCCGAGTTGGTTTCATCATCATTCAACGGTGGCCGAC
GGGCTCATCACCACGCTCCATTATCCAGCCCCAAAGCGCAACAAGCCCACTGTCTATGGTGTGTCCCCAACTAC
GACAAGTGGGAGATGGAACGCACGGACATCACCATGAAGCACAAGCTGGGCGGGGGCCAGTACGGGGAGGTGTAC
GAGGGCGTGTGGAAGAAATACAGCCTGACGGTGGCCGTGAAGACCTTGAAGGAGGACACCATGGAGGTGGAAGAG
TTCTTGAAAAGAAGCTGCAGTCATGAAAGAGATCAAACACCCTAACCTGGTGCAGCTCCTTGGGGTCTGCACCCGG
GAGCCCCGTTCTATATCATCACTGAGTTCATGACCTACGGGAACCTCCTGGACTACCTGAGGGAGTGCAACCGG
CAGGAGGTGAACGCCGTGGTGTCTGTGTACATGGCCACTCAGATCTCGTCAGCCATGGAGTACCTGGAGAAGAAA
AACTTCATCCACAGAGATCTTGCTGCCCCGAAACTGCCTGGTAGGGGAGAACCACTTGGTGAAGGTAGCTGATTTT
GGCCTGAGCAGGTTGATGACAGGGGACACCTACACAGCCCATGCTGGAGCCAAGTCCCCATCAAATGGACTGCA
CCCAGAGCCTGGCCTACAACAAGTTCTCCATCAAGTCCGACGTCTGGGCATTTGGAGTATTGCTTTGGGAAATT
GCTACCTATGGCATGTCCCCTTACCCGGGAATTGACCTGTCCCAGGTGTATGAGCTGCTAGAGAAGGACTACCGC
ATGGAGCGCCCAGAAGGCTGCCAGAGAAGGTCTATGAACTCATGCGAGCATGTTGGCAGTGGAAATCCCTCTGAC
CGGCCCTCCTTTGCTGAAATCCACCAAGCCTTTGAAACAATGTTCCAGGAATCCAGTATCTCAGACGAAGTGGAA
AAGGAGCTGGGGAAACAAGGCGTCCGTGGGGCTGTGAGTACCTTGTGTCAGGCCCCAGAGCTGCCCCACCAAGACG
AGGACCTCCAGGAGAGCTGCAGAGCACAGAGACACCACTGACGTGCCTGAGATGCCTCACTCCAAGGGCCAGGGA
GAGAGCGATCCTCTGGACCATGAGCCTGCCGTGTCTCCATTGCTCCCTCGAAAAGAGCGAGGTCCCCCGGAGGGC
GGCCTGAATGAAGATGAGCGCCTTCTCCCCAAAGACAAAAGACCAACTTGTTTCAGCGCCTTGATCAAGAAGAAG
AAGAAGACAGCCCCAACCCCTCCCAAACGCAGCAGCTCCTTCCGGGAGATGGACGGCCAGCCGGAGCGCAGAGGG
GCCGGCGAGGAAGAGGGCCGAGACATCAGCAACGGGGCACTGGCTTTTACCCCTTGGACACAGCTGACCCAGCC
AAGTCCCCAAAGCCCAGCAATGGGGCTGGGGTCCCCAATGGAGCCCTCCGGGAGTCCGGGGGGCTCAGGCTTCCGG
TCTCCCCACCTGTGGAAGAGTCCAGCACGCTGACCAGCAGCCGCTAGCCACCGGCGAGGAGGAGGGCGGTGGC
AGCTCCAGCAAGCGCTTCTGCGCTCTTGCTCCGCTCCTGCGTTCCCATGGGGCCAAGGACACGGAGTGGAGG
TCAGTCACGTGCCTCGGGACTTGCACTCCACGGGAAGACAGTTTGACTCGTCCACATTTGGAGGGCACAAAAGT
GAGAAGCCGGCTCTGCCTCGGAAGAGGGCAGGGGAGAACAGGTCTGACCAGGTGACCCGAGGCACAGTAACGCCT
CCCCCAGGCTGGTGAAGAAATGAGGAAGCTGCTGATGAGGTCTTCAAAGACATCATGGAGTCCAGCCCGGGC
TCCAGCCCGCCCAACCTGACTCCAAAACCCCTCCGGCGGCAGGTACCGTGGCCCTGCCTCGGGCCTCCCCAC
AAGGAAGAAGCTGGAAGGGCAGTGCCTTAGGGACCCCTGCTGCAGCTGAGCCAGTGACCCCCACCAGCAAAGCA
GGCTCAGGTGCACCAGGGGGCACCAGCAAGGGCCCCGCGAGGAGTCCAGAGTGAGGAGGCACAAGCACTCCTCT
GAGTCGCCAGGGAGGGACAAGGGGAAATTGTCCAGGCTCAAACCTGCCCGCCGCCCCACCAGCAGCCTCTGCA
GGGAAGGCTGGAGGAAGCCCTCGCAGAGCCCCGAGCCAGGAGGCGGCCGGGAGGCAGTCTTGGGCGCAAAGACA
AAAGCCACGAGTCTGGTTGATGCTGTGAACAGTGACGCTGCCAAGCCAGCCAGCCGGGAGAGGGCCTCAAAAAG
CCCGTGCTCCCGGCCACTCCAAAGCCACAGTCCGCGCAAGCCGTGGGGACCCCATCAGCCAGCCCCCGTTCC
TCCAGTTGCCATCAGCATCCTCGGCCCTGGCAGGGGACCGGCTCTTCCACCGCCTTCATCCCTCTCATATCA
ACCCGAGTGTCTCTTCGGAACCCCGCCAGCCTCCAGAGCGGATCGCCAGCGGCGCCATCACCAGGGCGTGGTC
CTGGACAGCACCGAGGCGCTGTGCCTCGCCATCTCTAGGAACCTCGAGCAGATGGCCAGCCACAGCGCAGTGTG
GAGGCCGGCAAAAACCTCTACACGTTCTGCGTGAGCTATGTGGATTCCATCCAGCAAATGAGGAACAAGTTTGGC
TTCCGAGAGGCCATCAACAACTGGAGAATAATCTCCGGGAGCTTCAAGTCTGCCCGGCGCAGGAGGAGTGGT
CCAGCGGCCACTCAGGACTTCAGCAAGCTCCTCAGTTCCGTGAAGGAAATCAGTGACATAGTGACAGGTAGCAG
CAGTCAGGGGTGAGGTGTGAGGCCGTGCGAGCTGCCTGCAGCACATGCGGGCTCGCCCATACCCGTGACAGTGG
CTGACAAGGGACTAGTGAGTCAGCACCTTGGCCAGGAGCTCTGCGCCAGGCAGAGCTGAGGGCCCTGTGGAGTC

WO 2004/030615

PCT/US2003/028547

3058/6881
FIGURE 2819B

CAGCTCTACTACCTACGTTTGCACCGCCTGCCCTCCCGCACCTTCCTCCTCCCCGCTCCGTCTCTGTCTCGAAT
TTTATCTGTGGAGTTCCCTGCTCCGTGGACTGCAGTCGGCATGCCAGGACCCGCCAGCCCCGCTCCCACCTAGTGC
CCCAGACTGAGCTCTCCAGGCCAGGTGGGAACGGCTGATGTGGACTGTCTTTTTCATTTTTTCTCTCTGGAGCC
CCTCCTCCCCCGCTGGGCCTCCTTCTTCCACTTCTCCAAGAAATGGAAGCCTGAACTGAGGCCTTGTGTGTGAGG
CCCTCTGCCTGCACTCCCTGGCCTTGCCCGTCGTGTGCTGAAGACATGTTTCAAGAACCGCATTTTCGGGAAGGGC
ATGCACGGGCATGCACACGGCTGGTCACTCTGCCCTCTGCTGCTGCCCGGGGTGGGGTGCCTCGCCATTTCTCTC
ACGTGCAGGACAGCTCTTGATTTGGGTGGAACAGGGGTGCTAAAGCCAACCAGCCTTTGGGTCTGGGCAGGTG
GGAGCTGAAAAGGATCGAGGCATGGGGCATGTCCTTTCCATCTGTCCACATCCCCAGAGCCCAGCTCTTGCTCTC
TTGTGACGTGCACTGTGAATCCTGGCAAGAAAGCTTGAGTCTCAAGGGTGGCAGGTCACTGTCACTGCCGACATC
CCTCCCCCAGCAGAATGGAGGCAGGGGACAAGGGAGGCAGTGGCTAGTGGGGTGAACAGCTGGTGCCAAATAGCC
CCAGACTGGGCCCAGGCAGGTCTGCAAGGGCCCAGAGTGAACCGTCCCTTTCACACATCTGGGTGCCCTGAAAGGG
CCCTTCCCCCTCCCCCACTCCTCTAAGACAAAGTAGATTCTTACAAGGCCCTTTCTTTTGAACAAGACAGCCTTC
ACTTTTCTGAGTTCTTGAAGCATTTCAAAGCCCTGCCTCTGTGTAGCCGCCCTGAGAGAGAATAGAGCTGCCACT
GGGCACCTGCGCACAGGTGGGAGGAAAGGGCCTGGCCAGTCCTGGTCCTGGCTGCACTCTTGAAGTGGGCGAATG
TCTTATTTAATTACCGTGAGTGACATAGCCTCATGTTCTGTGGGGGTCTATCAGGGAGGGTTAGGAAAACCACAAA
CGGAGCCCCCTGAAAGCCTCACGTATTTACAGAGCACGCCTGCCATCTTCTCCCCGAGGCTGCCCCAGGCCGGAG
CCCAGATACGGGGGCTGTGACTCTGGGCAGGGACCCGGGGTCTCCTGGACCTTGACAGAGCAGCTAACTCCGAGA
GCAGTGGGCAGGTGGCCGCCCTGAGGCTTACGCCGGGAGAAGCCACCTTCCCACCCCTTCATACCGCCTCGTG
CCAGCAGCCTCGCACAGGCCCTAGCTTTACGCTCATCACCTAAACTTGTACTTTATTTTTCTGATAGAAATGGTT
TCCTCTGGATCGTTTTATGCGGTTCTTACAGCACATCACCTCTTTGCCCCCGACGGCTGTGACGCAGCCGGAGGG
AGGCACTAGTCACCGACAGCGGCCTTGAAGACAGAGCAAAGCGCCACCCAGGTCCCCGACTGCCTGTCTCCAT
GAGGTACTGGTCCCTTCCTTTTGTAAACGTGATGTGCCACTATATTTTACACGTATCTCTTGGTATGCATCTTTT
ATAGACGCTCTTTTCTAAGTGGCGTGTGCATAGCGTCCTGCCCTGCCCCCTCGGGGGCCTGTGGTGGCTCCCCCT
CTGCTTCTCGGGGTCCAGTGCATTTTGTCTGTATATGATTCTCTGTGGTTTTTTTTTGAATCCAAATCTGTCTCT
CTGTAGTATTTTTTAAATAAATCAGTGTTTACATTAG

WO 2004/030615

PCT/US2003/028547

3059/6881
FIGURE 2820

GGCACGAGGAGATGGCGATGGAGATGAGGCTTCCAGTGGCTCGCAAGCCTCTTAGCGAGAGACTGGGCCGCGACA
CTAAGAAACATCTAGTGGTGCCGGGGGATACAATCACTACGGACACAGGATTTCATGCGGGGCCATGGAACGTATA
TGGGAGAAGAGAAGCTCATTGCATCTGTTGCTGGCTCTGTGGAGAGAGTAAACAAGTTGATCTGTGTGAAAGCTT
TGAAAACCAGATACATTGGTGAAGTAGGAGACATCGTAGTGGGACGAATCACAGAGGTTCAACAGAAGAGGTGGA
AGGTGGAGACCAACTCCAGGCTGGATTGCGTCTTGCTGCTCTCGTCCATGAACCTTCCTGGAGGAGAGCTGAGGA
GAAGATCTGCAGAAGATGAGCTTGCAATGAGAGGTTTCTTACAGGAAGGGGACCTTATCAGTGCTGAGGTCCAGG
CAGTGTCTCTGACGGAGCTGTCTCTTTGCACACGAGGAGCCTGAAATATGGAAGCTAGGTGAGGGGGTTTTGG
TCCAGGTTTCCCCCTCCCTGGTGAAACGGCAGAAGACCCACTTTTCATGATTTGCCATGTGGTGCCTCAGTGATTC
TCGGTAACAACGGCTTCATCTGGATTTACCCAACACCTGAGCACAAAGAAGAGGAAGCAGGGGGCTTCATTGCAA
ACCTGGAGCCTGTCTCTCTTGCTGATCGAGAGGTGATATCCCGGCTTCGGAAGTGCATCATCTCGCTGGTAACTC
AGAGGATGATGCTGTATGATACCAGCATCCTGTACTGCTATGAAGCATCCCTTCCACATCAGATCAAAGACATCT
TAAAGCCAGAAATAATGGAGGAGATTGTGATGGAACACGCCAGAGGCTTTTGAACAGGAGGGATTAAGGAGGTG
CTCCAGAAGCACGGGACTGTGGACCTTGCAGGAGTGAAGACTGTGATGTGTGGTCCCCATATGTGGCTCAGCAAA
GACTCGAGAGATCATCCCTTTGTCTGCATTGACGGCCCTGTGACGGCCTCCAGCCCACAGGCCTGCTTTCTCCTG
TCCTAACACCAAGCCTGGGTGGCAGATGAACAGTGCTTCCTTGGGTTGCCAGCTGAGTCCCGGTATTAGGGAATA
GTTTCAGCTCTTTCAAAGTGCACAGTGTTACAGTCGAATGGGCTCCCATCCTGGAATAATATGGAGAATCCTTTG
TCTTCCACTCACTGTCAATCACAAGGCACAGTGCCCCATGAAATTGCCCCAATAGAAAACATGGCATCCCTGACC
TCCAAATGGTCTGTTTTGGCCTCCATTCTATATCCTTTAAATGACTGAGAATGCAGCTGGTAAAGTTGGAAGAA
TAAAGTTAACCAAGCAGGCCAGGCACGGTGGCTCACGCCTATAATCCCAGCACTTAGGGAGGCCAAGGCGGGCAG
ATCACCTGAGGTCAATAGTTCGAGACCAGCCTGGCCAACAAGGTGAAACCCCATCTCTACTAAAAATACAAAAA
TTAGCCAGGTGTGGTGGTGTGCACCTGTAGTCCCAGCTATTTGGGAGGCTGAGGTGGGAGAATCACTTGAACCTG
GGAGGCGGAGGTTGCAGTGAGCTGAAATCGCGTACCACACTCCAGCCTGGGTGACAGAGCGAGACTGTGTTTCAA
AGAAAAAAAAAAAAACAAGCAGCCTTTTGCTTGGTTGGAATCTGATTTTCTGTTGCGTGTTCCTTGTAGCCATAGAT
GTGATTATGTCCACACCGGGCTGCCTTAATCTGTCTGCTTGGAGAGTGACTTGTAAGATGCTGAATTATTCATG
ATAATACAGTGAATGTTCTGGGTCCATGTACTCAGATAAACATGAAGAAAATAAGCAAAGAAAAATGGAGACTGG
GAAAGCAAAGCTGTTTTTCATCCTATAATTGAAGTAGTGTGGAGCATTAACTTGTGGATGATTGAGAGTTAAAGA
TAAAAAGACGCCAGAGTTCTCGCTGAAGAATGTGAGAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3060/6881
FIGURE 2821

MAMEMRLPVARKPLSERLGRDTKKHLVVPGDITITDTGFMRGHTYMGEKLIASVAGSVERVNKLICVKALKTR
YIGEVGDIVVGRITEVQQKRWKVETNSRLDSVLLLSMNLPGGELRRRSAEDELAMRGFLQEGDLISAEVQAVFS
DGA VSLHTRSLKYGKLGQGVLVQVSPSLVKRQKTHFDLP CGASVILGNNGFIWIYPTPEHKEEEAGGF IANLEP
VSLADREVISRLRNCIISLVTQRMMLYDTSILYCYEASLPHQIKDILKPEIMEEIVMETRQRLLEQEG

WO 2004/030615

PCT/US2003/028547

3061/6881
FIGURE 2822

GGCACGAGGCTTATAACCTGGGATGGGCACCCCTGCCAGTCCTGCTCTGCCGCCTGCCACCGCTGCCCGAGCCCG
ACGCTATGTCAGCAAAGGCTCCGTGGTTCTGGCCTACAGTGGCGGCCTGGACACCTCGTGCATCCTCGTGTGGC
TGAAGGAACAAGGCTATGACGTCATTGCCTATCTGGCCAACATTGGCCAGAAGGAAGACTTCGAGGAAGCCAGGA
AGAAGGCACTGAAGCTTGGGGCCAAAAAGGTGTTTCATTGAGGATGTCAGCAGGGAGTTTGTGGAGGAGTTTCATCT
GGCCGGCCATCCAGTCCAGCGCACTGTATGAGGACCGCTACCTCCTGGGCACCTCTCTTGCCAGGCCCTGCATCG
CCCGCAAACAAGTGAAATCGCCAGCGGGAGGGGGCCAAGTATGTGTCCCACGGCGCCACAGGAAAGGGGAACG
ATCAGGTCCGGTTTGAGCTCAGCTGCTACTACTGGCCCCCAGATAAAGGTCATTGCTCCCTGGAGGATGCCTG
AATTCTACAACCGGTTCAAGGGCCGCAATGACCTGATGGAGTACGCAAAGCAACACGGGATTCCCATCCCGGTCA
CTCCCAAGAACCCGTGGAGCATGGATGAGAACCTCATGCACATCAGCTACGAGGCTGGAATCCTGGAGAACCCCA
AGAACCAAGCGCCTCCAGGTCTCTACACGAAGACCCAGGACCCAGCCAAAGCCCCAACACCCCTGACATTCTCG
AGATCGAGTTCAAAAAAGGGTCCCTGTGAAGGTGACCAACGTCAAGGATGGCACCACCCACCAGACCTCCTTGG
AGCTCTTCATGTACCTGAACGAAGTCGCGGGCAAGCATGGCGTGGGCCGTATTGACATCGTGGAGAACCGCTTCA
TTGGAATGAAGTCCCGAGGTATCTACGAGACCCAGCAGGCACCATCCTTTACCACGCTCATTTAGACATCGAGG
CCTTCACCATGGACCGGGAAGTGCACAAAATCAAACAAGGCCTGGGCTTGAAATTTGCTGAGCTGGTGTATACCG
GTTTCTGGCACAGCCCTGAGTGTGAATTTGTCCGCCACTGCATCGCCAAGTCCCAGGAGCGAGTGGAAGGGAAAG
TGCAGGTGTCCGTCCCAAGGGCCAGGTGTACATCCTCGGCCGGGAGTCCCCACTGTCTCTCTACAATGAGGAGC
TGGTGAGCATGAACGTGCAGGGTGATTATGAGCCAACCTGATGCCACCGGGTTCATCAACATCAATTCCCTCAGGC
TGAAGGAATATCATCGTCTCCAGAGCAAGGTCACCTGCCAAATAGACCCGTGTACAATGAGGAGCTGGGGCCTCCT
CAATTTGCAGATCCCCCAAGTACAGGCGCTAATTGTTGTGATAATTTGTAATTGTGACTTGTTCTCCCCGGCTGG
CAGCGTAGTGGGGCTGCCAGGCCCCAGCTTTGTTCCCTGGTCCCCCTGAAGCCTGCAAACGTTGTCATCGAAGGG
AAGGGTGGGGGGCAGCTGCGGTGGGGAGCTATAAAAATGACAATTAAGAGACACTAGTCTTTTATTTCTAAAA
AAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3062/6881
FIGURE 2823

MSSKGSVVLAYS GGLDTSCILVWLKEQGYDVIAYLANIGQKEDFEEARKKALKLGAKKVFIEDVSREFVEEFIWP
AIQSSALYEDRYLLGTSLARPCIARKQVEIAQREGAKYVSHGATGKGNDQVRFELSCYSLAPQIKVIAPWRMPEF
YNRFKGRNDLMEYAKQHGIPIPVTPKNPWSMDENLMHISYEAGILENPKNQAPPGLYTKTQDPAKAPNTPDILEI
EFKKGVPVKVTNVKDGTHQTSLELFMYLNEVAGKHGVGRIDIVENRFIGMKSRGIYETPAGTILYHAHLDEAF
TMDREVRKIKQGLGLKFAELVYTGFWHSPECEFVRHCAKSQERVEGKVQVSVLKGQVYILGRESPLSLYNEELV
SMNVQGDYEPTDATGFININSLRLKEYHRLQSKVTAK

WO 2004/030615

PCT/US2003/028547

3063/6881
FIGURE 2824

AAAAATCGAGGCGGGGCTGAGAGGCTGCGGCGGCTGACTAGGTTTTTCGGACCGCGGCGGGCGGGGAAGAGAGAC
TGCGGCGGGAGGGCCAGGCCGTGGGAGAGACGCGGGAAAGTGCGGGTCGCAGAGGCACCTTGACCACCCCGCCCTA
GGCCGACCCGGCGGACGCGGCGTCTGGTGTGCGGGCGCTGGGGCGGGTCCCAGGTCTCCCCGCTGCGCTGCTTGA
GGCTCAGCCATGGCCAGCAGAGAGCCCTGCCCCAGAGCAAGGAGACGCTGCTGCAGTCCTACAACAAGCGGCTG
AAGGACGACATTAAGTCCATCATGGACAACCTTACCGAGATCATCAAGACCGCCAAGATTGAGGACGAGACGCAG
GTGTCACGGGCCACTCAGGGTGAACAGGACAATTACGAGATGCATGTGCGAGCCGCCAACATCGTCCGAGCCGGC
GAGTCCCTGATGAAGCTGGTGTCCGACCTCAAGCAGTTCTTGATCCTCAATGACTTCCCCTCCGTGAACGAGGCC
ATTGACCAGCGCAACCAGCAGCTGCGCACACTGCAGGAGGAGTGCGACCGGAAGCTCATCACGCTGCGAGACGAG
ATCTCCATTGACCTCTACGAGCTGGAGGAGGAGTATTACTCGTCCAGCTCAAGCCTTTGCGAAGCTAATGACCTG
CCTCTGTGCGAAGCTTACGGGAGGCTGGACCTCGACACAGACTCTGCTGATGGCCTCTCGGCCCCCTCTGCTGGCG
TCCCCGAGCCCAAGTGCTGGCCCCCTACAGGTGGCAGCCCCCTGCCCACTCCCATGCTGGTGGCCCTGGCCCCACT
GAGCACGCCTGAGCCTCCGGGGCCACGCTTCGTTCTCAGGAACAAAACCTGAGGCAGCCCTTTGGATGCCCTCAC
AGCCTTGCTTCTCTCAGCCTAGGTTCCCATTTGGGGACTTCAGGACCCAGAGCCACTAGGACTTCCTTGGGAAG
CCCGTTAGCCCAGGGTGGGTCCCACCAGGACAGTAGGGAAACAGTTGTTTCCCTAGCCATTTCCGAATAGCCCAT
CATTCAGATCATCATCTCTGTTTGCTGCCTTCCTGGCCAGCCAGGTGGAAGAAAGTTTCCAAGCTAGGTCTGGC
CCGTTGGGGATCTCAGCAGTGGGGCAGGAGGGTGCCTGATTTGCGGGAGTCCTGACCCGAGCCTGTTGTGAGAGT
TGGGAGGGGCTCTGAGCAGTGTTGGGCAGGCCGGGTCTCCCATCCCGAGGCCAGCGTTCTGTGCAGAGCCCCAT
CCTGCTGTTCTTGCCCTGAGCCACATATGTCTGTGCCATGGGCTGAGTGCCACGACAGGCCCGTGTGACAGCTGC
TGCCCCACGCATGTGGAAGCTAGGTGGGACTCATTCTTAATTCTGCCGTTGTAATGAGACTTGATTAAAACACCGC
CACTTTTTTGC

WO 2004/030615

PCT/US2003/028547

3064/6881
FIGURE 2825

GGAGAAGGGAGGGCGCCTGGCTGTATCCCCCGCAGGCCCTCTTCCGAGAGCCTTCCTCCTCGGGCAGTGCGTTCTG
GGGCTGTGCTGCTCCTGTTACCTTCTGAAACCTTCGACCGTTTGAGCTGGAGGGGGCCCTGAGAAATCAGAGTCTA
CGTATCATTCTACTTAGGGGGAAACTTAGGCTGGAGACAGGGAGGCCCTTCCACTCTGCCCCATTAGCTTAGAAAAT
CAAGATTCAAGTCCAGCAGATGCAGAGTCCATGTCCATCTTGTGCCTTCTCCTGGACAAACCTTTCTTCTGCTGGT
GTGGATTTAAATACTCCTTTCTGCCCCATTGGCCATGCTGGGAGCCACAGCTATCCAGAGCCAGCATGACCTGGG
GCTTGGTTTCCCTGCCCTGGGCTCAGTGGCACTGCTGAGCTGCAGCAGTCCCTAGAGTTTTCCAGGGGGTTCTGAG
GGAATCTTTGGTCCCCAGTACTCATTAACCTCAGCAGACATGAGGCAGCATTTCTCCACACTAGGGTGGCTGAGA
GGGGTCTGGGGTGTTCAGACCCCTTCTGGGCATCTCCTTCCACAGCTGTTTCAGTTTGTGGTCTCTTTGAGGCA
GCCACCGTCCCTGAGGGGCCCTGCACAGAGCAGCTGTGGGCCTGTAATTCAGCCTGCCTGCCTTGCCCTTGGGGCA
GGGAGAGAGGGAACTGCTCACGGCCCTGCAGCAGAGCAGGGCGCAAACCCAGGACATCTGTGCCAGGCTTCCCA
TGCCCTCCCCAACAGTCCCTCAGCTTCACCCAGCGGGGCTTCCAGGCCAGCCTGTGTCCCTCCCGCAGGCCTC
CTGTCCACACCAGCGCCCCCTGGGGGGCCTCACACAGCCCCCTGGCTTTCTCTCTGCCTGCTCCTGTCTCTCCCT
GGGGTTTCTGGTGGTGGAAAAGCTCAAGCCTTTGCGAAGCTAATGACCTGCCTCTGTGCGAAGCTTACGGGAGGC
TGGACCTCGACACAGACTCTGCTGATGGCCTCTCGGCCCTCTGCTGGCGTCCCCGGAGCCAGTGTGGCCCCC
TACAGGTGGCAGCCCCCTGCCACTCCCATGCTGGTGGCCCTGGCCCCACTGAGCACGCCTGAGCCTCCGGGGCCA
CGCTTCGTTCTCAGGAACAAAACCTGAGGCAGCCCTTGGATGCCCTCACAGCCTTGCTTCTCTCAGCC

WO 2004/030615

PCT/US2003/028547

3065/6881
FIGURE 2826

TTTCCTTTCTCTCTCCTCCCGCCGCCCAAGATGCCGAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCCGGCC
CCAGCTGTCGTGAAGAAGCAGGAGGCTAAGAAAGTGGTGAATCCCCTGTTTGAGAAAAGGCCTAAGAATTTTGGC
ATTGGACAGGACATCCAGCCCAAAAGAGACCTCACCCGCTTTGTGAAATGGCCCCGCTATATCAGGTTGCAGCGG
CAGAGAGCCATCCTCTATAAGCGGCTGAAAGTGCCTCCTGCGATTAAACCAGTTCACCCAGGCCCTGGACCGCCAA
ACAGCTACTCAGCTGCTTAAGCTGGCCCAAGTACAGACCAGAGACAAAGCAAGAGAAGAAGCAGAGACTGTTG
GCCCCGGCCGAGAAGAAGGCTGCTGGCAAAGGGGACGTCCCAACGAAGAGACCACCTGTCCTTCGAGCAGGAGTT
AACACCGTCACCACCTTGGTGGAGAACAAGAAAGCTCAGCTGGTGGTGATTGCACACGACGTGGATCCCATCGAG
CTGGTTGTCTTCTTGCCCTGTGTCGTAAAATGGGGGTCCCTTACTGCATTATCAAGGGAAAGGCAAGACTG
GGACGTCTAGTCCACAGGAAGACCTGCACCACTGTGCGCTTCACACAGGTGAACTCGGAAGACAAAGGCGCTTTG
GCTAAGCTGGTGAAGCTATCAGGACCAATTACAATGACAGATACGATGAGATCCGCCGTCACTGGGGTGGCAAT
GTCCTGGGTCCTAAGTCTGTGGCTCGTATCGCCAAGCTCGAAAAGGCAAAGGCTAAAGAACTTGCCACTAAACTG
GGTTAAATGTACACTGTTGAGTTTTCTGTACATAAAAATAATTGAAATAATACAAATTTTCCTTC

WO 2004/030615

PCT/US2003/028547

3066/6881
FIGURE 2827

MPKGKKAKGKKVAPAPAVVKKQEAKKVVNPLFEKRPKNFGIGQDIQPKRDLTRFVKWPRYIRLQRQRAILYKRLK
VPPAINQFTQALDRQTATQLLKLAHKYRPETKQEKQORLLARAEEKKAAGKGDVPTKRPPVLRAGVNTVTTLVENK
KAQLVVIAHDVDPIELVVFLPALCRKMGPYCIKKGARLGRLVHRKTCTTVAFTQVNSEDKGALAKLVEAIRTN
YNDRYDEIRRHWGGNVLGPKSVARIAKLEKAKAKELATKLG

WO 2004/030615

PCT/US2003/028547

3067/6881
FIGURE 2828

GGAGCCGCGAGCCGACGCGGAGCGAGGCCGGCCGCCGGGCACTTCTGTGGAGGCCGAGCGGGTGCGGGCGCCGA
CGGGCGAGAGCCAGCGAGCGAGCGAGCGAGCCGAGCCGAGCCTCCCGCCGTCGCCATGGGCCAGAACGACCTGAT
GGGCACGGCCGAGGACTTCGCCGACCAGTTCTCTCCGTGTACAAAGCAGTACCTGCCCCACGTGGCGCGCCTCTG
TCTGATCAGCACCTTCTCTGGAGGACGGCATCCGTATGTGGTTCCAGTGGAGCGAGCAGCGCGACTACATCGACAC
CACCTGGAACCTGCGGCTACCTGCTGGCCTCGTCCTTCGTCTTCTCAACTTGCTGGGACAGCTGACTGGCTGCGT
CCTGGTGTGAGCAGGAACCTCGTGCAGTACGCCTGCTTCGGGCTCTTTGGAATCATAGCTCTGCAGACGATTGC
CTACAGCATTTTATGGGACTTGAAGTTTTTGATGAGGAACCTGGCCCTGGGAGGAGGCCTGTTGCTGCTCCTAGC
AGAATCCCGTTCTGAAGGGAAGAGCATGTTGCGGGCGTCCCCACCATGCGTGAGAGCTCCCCAAACAGTACAT
GCAGCTCGGAGGCAGGGTCTTGCTGGTTCTGATGTTTCATGACCCTCCTTCACTTTGACGCCAGCTTCTTTTCTAT
TGTCAGAACATCGTGGGCACAGCTCTGATGATTTTAGTGGCCATTGGTTTTAAACCAAGCTGGCTGCTTTGAC
TCTTGTGTGTGGCTCTTTGCCATCAACGTATATTTCAACGCCTTCTGGACCATTCCAGTCTACAAGCCCATGCA
TGACTTCTGAAATACGACTTCTTCCAGACCATGTCGGTGATTGGGGCTTGCTCCTGGTGGTGGCCCTGGGCCC
TGGGGGTGTCTCCATGGATGAGAAGAAGAAGGAGTGGTAACAGTCACAGATCCCTACCTGCCTGGCTAAGACCCG
TGGCCGTCAAGGACTGGTTCGGGGTGGATTCAACAAAACCTGCCAGCTTTTATGTATCCTCTTCCCTTCCCTCCC
TTGGTAAAGGCACAGATGTTTGAAGACTTTATTTGCAGAGACACCTGAGAATCGATGGCTCAGTCTGCTCTGGA
GCCACAGTCTGGCGTCTGACCCTCAGTGCAGGCCAGCCTGGCAGCTGGAAGCCTCCCCACGCCGAGGCTTTGG
AGTGAACAGCCCGCTTGGCTGTGGCATCTCAGTCTATTTTTAGTTTTTTTGTGGGGGTACAGGAGGGGGCCTT
CAAGCTGTACTGTGAGCAGACGATTGGTATTATCATTCAAAGCAGTCTCCCTCTTATTTGTAAGTTTACATTTT
TAGCGAAACTACTAAATATTTTGGGTGGTTTCAAGCAAACCTCAAACAGTTAATCTCCCTGGTTTTAAATCAC
ACCAGTGGCTTTGATGTTGTTCTGCCCCGATTGTATTTTTATAGGAATAGTGAACATTTAGGGACACCCAAA
GAATGATGCAGTATTAAAGGGGTGGTAGAAGCTGCTGTTTATGATAAAAGTCATCGGTGAGAAAATCAGCTTGA
TTGGTGCCAAGTGTTTTATTGGGTAAACACCCTGGGAGTTTTAGTAGCTTGAGGCAAGGTGGAGGGGCAAGAAGTC
CTTGGGGAAGCTGCTGGTCTGGGTGCTGCTGGCCCTCAAGCTGGCAGTGGGAAGGGCTAGTGAGACCACACAGGG
GTAGCCCCAGCAGCAGCACCCTGCAAGCCAGCCTGGCCAGCTGCTCAGACCAGCTTGAGAGCCGCGAGCCGCTGT
GGGCAGGGGGTGTGGCAGGAGCTCCCGAGCACTGGAGACCCACGGACTCAACCCAGTTACCTCACATGGGGCCTTT
TCTGAGCAAGGTCTCGAAAGCGCAGGCCGCCCTGGCTGAGCAGCACCGCCCTTTCCAGCTGCCTCGCCCTGTG
GACAGCCCCGACACACCACTTTCTGAGGCTGTGCTCACTCAGATTGTCCGTTTGTATGCCGAATGCAGCCAA
AATTCCTTTTTACAATTTGTGATGCCTTACCGATTTGATCTTAATCCTGTATTTAAAGTTTTCTAACACTGCCTT
ATACTGTGTTTCTCTTTTTGGGGGAGCTTAACTGCTTGTGTCTCCCTGTCTGCTGCACCATAGTAAATGCCACAA
GGGTAGTCGAACACCTCTCTGGCCCCCTAGACCTATCTGGGGACAGGCTGGCTCAGCCTGTCTCCAGGGCTGTG
GGCCAGCCCCGAGCCTGCCTCCCTCTTGGCCTCTCATCCATTGGCTCTGCAGGGCAGGGGTGAGGCAGGTTTCT
GCTCATAAGTGCTTTTGGAAGTCACCTACCTTTTTTAACACAGCCGAAGTCCCAACGCGTTTGCAATATTCC
CCTGGTAGCCTACTTCTTACCCCCGAATATTGGTAAGATCGAGCAATGGCTTCAGGACATGGGTTCTCTTCTCC
TGTGATCATTCAAGTGCTCACTGCATGAAGACTGGCTTGTCTCAGTGTTCACCTCACCAGGGCTGTCTCTTG
TCCACACCTCGCTCCCTGTTAGTGCCGTATGACAGCCCCATCAAATGACCTTGGCCAAGTCACGGTTTCTCTGT
GGTCAAGGTTGGTTGGCTGATTGGTGGAAAGTAGGGTGGACCAAGGAGGCCACGTGAGCAGTCAGCACCAGTTC
TGCACCAGCAGCGCCTCCGTCTAGTGGGTGTTCTGTTTCTCTGGCCCTGGGTGGGCTAGGGCCTGATTCGGG
AAGATGCCTTTGCAGGGAGGGGAGGATAAGTGGGATCTACCAATTGATTCTGGCAAAACAATTTCTAAGATTTT
TTGCTTTATGTGGGAAACAGATCTAAATCTCATTTTATGCTGTATTTATATCTTAGTTGTGTTGAAAACGTTT
TGATTTTTGGAAACACATCAAAATAAATAATGGCGTTTGTGTAAAAA

WO 2004/030615

PCT/US2003/028547

3068/6881
FIGURE 2829

MGQNDLMGTAEDFADQFLRVTKQYLPHVARLCLISTFLEDGIRMWFQWSEQRDYIDTTWNCGYLLASSFVFLNLL
GQLTGCVLVLSRNFVQYACFGLFGI IALQTIAYSILWDLKFLMRNLALGGGLLLLAESRSEGKSMFAGVPTMRE
SSPKQYMLGGRVLLVLMFMTLLHFDASFFSIVQNIVGTALMILVAIGFKTKLAALTLVVWLFAINVYFNAFWTI
PVYKPMHDFLKYDFFQTMSVIGLLLVALGPGGVSMDEKKKEW

WO 2004/030615

PCT/US2003/028547

3069/6881
FIGURE 2830

ACCCAGCCATGCCCGCCCTCAGTCGCTGGGCCAGCCTGCCCGCCCCAGCATGCGGGAGGCAGCCTTCATGTAC
AGCACAGCAGTGGCCATCTTCTGGTCATCTGGTGGCCGCACTGCAGGGCTCGGCTCCCCGTGAGAGCCCCCTC
CCCTATCACATCCCCCTGGACCCGGAGGGGTCCCTGGAGCTCTCATGGAATGTCAGCTACACCCAGGAGGCCATC
CATTTCCAGCTCCTGGTGGGAGGCTCAAGGCTGGCGTCTGTTTGGGATGTCCGACCGTGGCGAGCTTGAGAAC
GCAGATCTCGTGGTGCTCTGGACCGATGGGGACACTGCCTATTTTGGGACGCCTGGAGTGACCAGAAGGGGCAG
ATCCACCTGGATCCCCAGCAGGACTACCAGCTGCTGCAGGTGCAGAGGACCCAGAAAGGCCTGACCCTGCTTTTC
AAGAGGCCCTTTGGCACCTGGGACCCCAAGGATTACCTCATTGAGGACGGCACTGTCCACTTGGTCTACGGGATC
CTGGAGGAGCCGTTCCGGTCACTGGAGGCCATCAACGGCTCGGGCCTGCAGATGGGGCTGCAGAGGGTGCAGCTC
CTGAAGCCCAATATCCCCGAACCGGAGTTGCCCTCAGACGCGTGCACCATGGAGGTCCAAGCTCCCAATATCCAG
ATCCCCAGCCAGGAGACCAGTACTGGTGCTACATTAAGGAGCTTCCAAAGGGCTTCTCTCGGCACCACATTATC
AAGTACGAGCCCATCGTCACCAAGGGCAATGAGGCCCTTGTCACCACATGGAAGTCTTCCAGTGCGCCCCGAG
ATGGACAGCGTCCCCCACTTCAGCGGGCCCTGCGACTCCAAGATGAAACCCGACCGCCTCAACTACTGCCGCCAC
GTGCTGGCCGCTGGGCCCTGGGTGCCAAGGCATTTTACTACCCAGAGGAAGCCGGCCTTGCCCTTCGGGGGTCCA
GGGTCTCCAGATATCTCCGCTGGAAGTTCACTACCACAACCCACTGGTGATAGAAGGACGAAACGACTCCTCA
GGCATCCGCTTGTAATAACAGCCAAGCTGCGGCGCTTCAACGCGGGGATCATGGAGCTGGGACTGGTGTACACG
CCAGTGATGGCCATTCCACCAGGGAGACCGCCTTCATCCTCACTGGCTACTGCACGGACAAGTGCACCCAGCTG
GCACTGCCTCCCTCCGGATCCACATCTTCGCTCTCAGCTCCACACACACCTGACTGGGAGAAAGGTGGTACA
GTGCTGGTCCGGGACGGCCGGGAGTGGGAGATCGTGAACCAGGACAATCACTACAGCCCTCACTTCCAGGAGATC
CGCATGTGAAGAAGGTGCTGTCGGTCCATCCGGGAGATGTGCTCATCACCTCCTGCACGTACAACACGGAAGAC
CGGGAGCTGGCCACAGTGGGGGGCTTCGGGATCCTGGAGGAGATGTGTGTCAACTACGTGCACTACTACCCCCAG
ACGCACTGGAGCTCTGCAAGAGCGCTGTGGACGCCGGCTTCCTGCAGAAGTACTTCCACCTCATCAACAGGTTT
AACAACGAGGATGTCTGCACCTGCCCTCAGGCGTCCGTGTCTCAGCAGTTACCTCTGTTCCCTGGAACCTCTTC
AACC GCGACGTACTGAAGGCCCTGTACAGCTTCGCGCCCATCTCCATGCACTGCAACAAGTCTCAGCCGTCCGC
TTCCAGGGTGAAATGGAACCTGCAGCCCCCTGCCCAAGGTCACTCTCCACACTGGAAGAGCCACCCACAGTGCCCC
ACCAGCCAGGGCCGAAGCCCTGCTGGCCCCACCGTTGTACGATTGGTGGGGGCAAAGGCTGAGAGGGGGACCTAC
TCCTCCCCCTCCTCCATGCTGTCCCTGTGGGCTCACACCGGCACTGTGCACTCTACTCTGCGACGATCCCCATGG
AACAGCCCTGCACGCCCCAGGATGAAGGGGCCAGACCACGCCCCCTGCCTGAGACCACGGTCCAATCCAGCCTTCTT
CCCCCAGGGTCCCCTGCATGGCTGAGAGGGTGTGGGTGCCCTGTTGACCTACCCTGGACCGAGTGGACCACGACC
TCGTCCATTTAAACCCGGCTGACTCAGTGACGGGACAGCCTGCACAGTGGTCCAGGGTCCAGCCCTCCGCCAGCC
CTGTTCCGCTCACTGGGTGTGGCTGGCTTCTGGGACAGGCACCATGCTGGGCCGGGGTGTGGAATCACCGGGA
ACGCCCCCGCCCCCGCCCCGCTGCTCCCGGTGTGCAGCGGGTGCGGGTGCCGCTTAAACATTTCCCTGCTGAGTG
GCTCGTGTTCACAGTGGGCGGCTTCCCTGCGACGGGAGGCAGGACCAGGCATTTAGCTAGTTAGAGACTCGCCTG
GGAAATTGCTCCATTCTGAGTAAACAGATATTTTCGCCACCTAAAGGGAAGCCCTGACAACAATATCACCAA
AAGACGAGGCGGCAAAGATCCAGCGGGGCTTCTGGGCGCCGGTTCCACGTGGGGTGAATTATTAGCACCAGCTT
GCTTCTTGCCGGTGGGGCCAGCGCTGAACAGACCGGGGTGGAGTCAGGGCTGTGCTTTCCGCGTGGTTCTGCCA
CTTAGGGAGTGTGCTTGGGCGGGCCATTTACATTCTGACCCTCACTTTTCTCATCTGTAAACCAGGCTGAT
GCCGTGCGGGCTAATGAGCCAATAAAGCTCACACTTGGGCTGGCACCCACTGGAGGTGGG

WO 2004/030615

PCT/US2003/028547

3070/6881
FIGURE 2831

MREAAFMYSTAVAI FLVILVAALQGSAPRESPLPYHIPLDPEGSLELSWNVSYTQEAIHFQLLVRRRLKAGVLFGM
SDRGELNADLVVLWTDGDTAYFADAWSDQKGQIHLDPQQDYQLLQVQRTPEGLTLLFKRPFGTCDPKDYLIEDG
TVHLVYGILEEPFRSLEAINGSLQMG LQRVQLLKPNIPEPELP SDACTMEVQAPNIQIP SQETTYWCYIKELPK
GFSRHHIIKYEPIVTKGNEALVHHMEVFQCAPEMDSVPHFSGPCDSKMKPDRLNYCRHVLA AWALGAKAFYYPEE
AGLAFGGPGSSRYLRLEVHYHNPLVIEGRNDSSGIRLYYTAKLRRFNAGIMELGLVYTPVMAIPPRETAFILTGY
CTDKCTQLALPPSGIHIFASQLHThLTGRKVVTVLVRDGREWEIVNQDNHYS PHFQEIRMLKKVVS VHPGDVLIT
SCTYNTEDRELATVGGFGILEEMCVNYVHYYPQTQLELCKSAVDAGFLQKYFHLINRFN NEDVCTCPQASVSQQF
TSVPWNSFN RDVLKALYSFAPISMHCNKSSAVRFQGEWNLQPLPKVISTLEETPQCPT SQGRSPAGPTTVVSIGG
GKG

WO 2004/030615

PCT/US2003/028547

3071/6881
FIGURE 2832A

GATTTCTCCACCCAGGTGAACTCCTCCCTCACCTCCCCGACGGGGCGAGGCTCCATGGCTGCCCCCTCGCTGCAC
CCGTCCTGGGGCCTGGCATCGGCTCCCCGGGACAGCTGCATTCTCCCATCAGCACCCCTGAGCTCCCCCATCAAC
GGCATGGGCCCCGCTTTCTCGGTTCATCAGCTCCCCCATGGGCCCCCACTCCATGTCGGTGGCCACCACACCCACC
CTGGGCTTCAGCACTGGCAGCCCCCAGCTCAGCTCACCTATGAACCCCGTCAGCAGCAGCGAGGACATCAAGCCC
CCCCCTGGGCTCAATGGCGTCTCTCAAGGTCCCCGCCACCCCTCAGGAAACATGGCTTCTTACCAAGCACATC
TGCGCCATCTGCGGGGACCGCTCCTCAGGCAAGCACTATGGAGTGTACAGCTGCGAGGGGTGCAAGGGCTTCTTC
AAGCGGACGGTGCAGCAAGGACCTGACCTACACCTGCCGCGACAACAAGGACTGCCTGATTGACAAGCGGCAGCGG
AACCGGTGCCAGTACTGCCGCTACCAGAAGTGCTGGCCATGGGCATGAAGCGGGAAGCCGTGCAGGAGGAGCGG
CAGCGTGGCAAGGACCGGAACGAGAATGAGGTGGAGTCGACCAGCAGCGCAACGAGGACATGCCGGTGGAGAGG
ATCCTGGAGGCTGAGCTGGCCGTGGAGCCCAAGACCGAGACCTACGTGGAGGCAACATGGGGCTGAACCCAGC
TCGCCAAGCAGCCCTGTCACCAACATTGCAAGCAGCCGACAAACAGCTTTTACCCCTGGTGGAGTGGGCCAAG
CGGATCCCACACTTCTCAGAGCTGCCCCGTGGACGACCAGGTTCATCCTGCTGCGGGCAGGCTGGAATGAGCTGCTC
ATCGCTCCTTCTCCCACCGCTCCATCGCGTGAAGGACGGGATCCTCCTGGCCACCGGGCTGCACGTCCACCGG
AACAGCGCCACAGCGCAGGGGTGGGCGCCATCTTGACAGGGTGCTGACGGAGCTTGTGTCAAGATGCGGGAC
ATGCAGATGGACAAGACGGAGCTGGGCTGCCGCGCCATCGTCTCTTAACCCCTGACTCCAAGGGGCTCTCG
AACCCGGCCGAGGTGGAGGCGCTGAGGGAGAAGGTCTATGCGTCTTGAGGCTTACTGCAAGCACAAGTACCCA
GAGCAGCCGGGAAGGTTGCTAAGCTCTTGCTCCGCTGCCGGCTCTGCGCTCCATCGGGCTCAAATGCCTGGAA
CATCTCTTCTTCAAGCTCATCGGGGACACACCCATTGACACCTTCTTATGGAGATGCTGGAGGCGCCGCAC
CAAATGACTTAGGCCTGCGGGCCCATCCTTTGTGCCACCCGTTCTGGCCACCCCTGCCTGGACGCCAGCTGTTCT
TCTCAGCCTGAGCCCTGTCCCTGCCCTTCTCTGCTGGCTGTTTGGACTTTGGGGCACAGCCTGTCACTGCTCT
GCCTAAGAGATGTGTTGTACCCCTCCTTATTTCTGTTACTACTTGTCTGTGGCCAGGGCAGTGGCTTTCCTGAG
GCAGCAGCCTTCGTGGCAAGAACTAGCGTGAGCCAGCCAGGCGCTCCCCACCGGGCTCTCAGGACACCCCTGCC
ACACCCACCGGGCTTGGGCGACTACAGGCTTTCGGGCCCCAGCCCTGGAGCTGCAGGAGTTGGGAACGGGGCT
TTTGTTCGTTGCTGTTTATCGATGCTGGTTTTAGAAATCCTGTGTGCCCTCCTGTCTGGAGTGACATCTTC
ATCTGCTCTGAATACTGGTGCCAGCCAGCCCGTGACAGCTTCCCCCTAATCAGGAGGGGACAGCTGGGGGCGCA
AGCTGGTGTGTATCAGCAAAGACCTCAGCCGCTCGGGGATGAGAGGGGACTCGTGGGGCAAGCAAGCTGCCCT
GTGCTCTGAGTGAGGGGAAGGTAGCCCCTTTTTCCAAAGATAACTCACAGTTTTGCCCTCGAGCCAATGAGAAC
ATGAGCTGCCCTCTGTGCAAGGTTTCGGGGCCACCTCCAGGCTGCAGGGGCGGGTCACTCACCCCCCTGTTTTCT
CTCTGCCCTTGGTGTTCGTGTTTTCAGACTCCCGACTCCCGTTTCAGACCAGAGTGCCCCGGCCCCCTCCCCAGCCTG
AGTCTTCTCCTTGCTCTGCGGGGTGGGCTGAGGCTTGTCTTGTTCCTGCAGGGCTGGCCCTGGCTCGGGCAGG
GTGGGGCATCACCACTCACTGGCCTTGCTGGAGGCACAGGGCTCTGCGGACCTGCAGCCATCTGTGAGGCCCCG
GGGGATGGGAGGGGAGGAGGGTGGCCTGTTGGTTTCCCTCAGAGGGGGCAGGTGGCCTGGAGAGAGAGGGGCTCA
GGAAGTGGGAGCCTCGTGGGTGGGGCAGATGCTCCGCGGCTGGAGTGGCTCTGCCGGGGCATTGGTGGGACCCC
TGCTCAGGCCTTCTCTCTGGCTGCCAGTTGTGTCTAAAAGACTCTTGGAATCTGAGAACCCGGAGTCGCAGCGCC
CTCGGGCCTGGGCCACACGCAGGCCCTGGTGGGACCACCCAGCCTGGTATTGTCCACGGACAGCGTTGTTACCCC
AGAGCCTTACTTGGGAGCCTCACTGAACGCCTGCTCTGGTTGAAGGTGGGGTGGGGGCGGGGCTTGGGGCCTCCC
TGGCTCAGCCCAGTGCGGCCTGGCGCTCCTCCCGCAGGCTCTGCCCCGGGCTCCGGTGGTGCGGGGGCCCTCTCA
GGTTGAAGTGCCTCTTTTGACTGGAAGGCCCTCCCTTTGGCCTGAGTACTTTTCCCGTTACGCCTCAGTCCC
GTGGACCCAGCCTTTGTAGTGGCAGGTGCCTGAACAGAGGGTGGATGGGGGGGATACCGGAGGGGGTCTTGTCT
TCCCAGCCGACGTCTAGGAATGATGCGGGGGGGTGGACGCCCTTCTCCATAGTCTTTCCCACTGGAGCAGGGG
TTCTCAGTGGTGGGGGAGCTGCCTACAGGTTGGACGGGAGGAGTGGCTTGGAGAGGCAGCTTTCCAGCCTT
GGTGGGGAAGAAAGTGTCCATTCTTGCCTTCTGGAGCTCCAGCCAGAGCTGAGCTTAGGCACCCGAGTGGAG
CCTGCAGCTGAGTCTGTGCCCAGACAGGCTGTGAGAGATTCCAGAAGCCTCTCCTCCCCGCCGCCCTCCACCCC
TGCTTTACAGCTTGTGGATCCCTAGAGGTGGCCCCCTGCCGATCCACCGTCTGAGGCAGAGTGTGAGCCTC
ATACCTGTACCAGGTCCCCGGCCAGCTGGGCCCCCTCCAGGCACTGCCAGGAAGCCCCAGCTGCCCCCTGGCGGGT
GTGGTGGAAATGGCAGGAGGGTGCAGGTACTCTTGGGGCCCCAGCGGTGGGAGTGCAAAAGACCCAACGCCAACA
CCTGGTGCCTTCTGCAGCCAGCGCCACCCATCCGTGCCCGGACCCTTGGAATGCCCGCGGCTCCAGAGGAAAA
AGCCCAGGGACGGGGCTCCGTTGCGGGGGTCCGCTGCTTCTTGGGAAGTTGTGCTTTCGGCGCTGGCTGGC

WO 2004/030615

PCT/US2003/028547

3072/6881
FIGURE 2832B

TGGCTGGCTGGCTGTAAAGCACTGAAGCCCCCGGCCGCCAACCCCTGAAAGCAGAACCTGGCCTCCCTGGCCAC
AGCAGCCTTACCCACCGCTCTACGTGTCCCGGGCACTTCCCGCAGCCTTCCCGTCCCTTTCTCATCGGCCTTGTA
GTTGTACAGTGCTGTTGGTTTAAAAAGGTGATGTGTGGGGAGTGCGGCTCATCACTGAGTAGAGAGGTAGAATTT
CTATTTAAACCAGACCTGTAGTAGTATTACCAATCCAGTTCAATTAAGGTGATTTTTTGTAAATTATTATTTTG
GTGGGACAATCTTTAATTTTCTAAAGATAGCACTAACATCAGCTCATTAGCCACCTGTGCCTGTCCCCGCTTG
CCCCGCTGGATGAAGCGGCTTCCCGCAGGGCCCCCACTTCCAGTGCGCTTCTGGGGACCCAGGGCACCCC
GGCACCTTCAGGCACGCTCCTCAGCTGGTCACCTCCCGGCTTTGCCGTTTCAAGTGGGGCTCCTGAGGCTCAGGAG
TGAAGATGCCACAGAGCCGGGCTCCCTAGGCTGCGTCGGGCATGCTTGGAAGCTGGCCTGCCAGGACCTTCCAC
CCTGGGGCCTGTGTAGCCGCCGGCCCTCCGCACCTGGAAAGCACACGGCCTCTGGGAAGGACAGCCCTGACCTT
CGGTTTTCCGAGCACGGTGTTCCTCAAGAATTCTGGGCTGGCGGCCTGGTGGCAGTGCTGGAGATGACCCCGAGC
CCCTCCCGTGGGGACCCAGGAGGGCCCTGCCGGAATGTGCAGCCTGTGGGTAGTCGGCTGGTGTCCCTGTGCT
GGAGCTGGGGTGCCTGATCTGGTGTCTGTCACGCAGGTGTGTGGTGTAAACATGTATGTGCTGTACAGAGAGAC
GCGTGTGGAGAGAGCCGCACACCAGCGCCACCCAGGAAAGGCGGAGCGGTACCAGTGTGTGTGTTATTTTTTA
ATCAAGACGTTTTCCCTGTTTTCTATAAAATTTGCTTCGTGTAAGCAAGTACATAAGGACCCCTCCTTTGGTGAAA
TCCGGGTTTCAATGAATATCTCAAGGCAGGAGATGCATCTATTTTAAGATGCTTTGGAGCAGACAGCTTTAGCCG
TTCCCAATCCTTAGCAATGCCTTAGCTGGGACGCATAGCTAATACTTTAGAGAGGATGACAGATCCATAAAGAGA
GTAAAGATAAGAGAAAATGTCTAAAGCATCTGGAAAGGTAAAAAATAATCTATTTTTGTACAAATGTAATTT
TATCCCTCATGTATACTTGGATATGGCGGGGGAGGGCTGGGACTGTTTCGTTTCTGCTTCTAGAGATTGAGGTG
AAAGCTTCGTCCGAGAAACGCCAGGACAGACGATGGCAGAGGAGAGGGCTCCTGTGACGGCGGCGAGGCTTGGA
GGAAACCGCCGAATGGGGGTGTCTTCCCTCGGGGCAGGAGGGTGGGCCTGAGGCTTTCAAGGGTTTTCTTCCCT
TTCGAGTAATTTTTAAAGCCTTGCTCTGTGTGTCTGTGCGGCTCTGGCCTTCTGTGACTGACTGTGAAGT
GGCTTCTCCGTACGATTGTCTCTGAAACATCGTGGCCTCAGGTGCCAGGGTTTGATGGACAGTAGCATTAGAATT
GTGGAAGGAACACGCAAGGGAGAAAGTGTGAGAGGAGAAACAAATATGAGCGTTTAAATACATCGCCATTC
AG

WO 2004/030615

PCT/US2003/028547

3073/6881
FIGURE 2833

CTGATGGAATAACAAAGACAACAGGCTTTTGCGCCACGCGGCGATCTTCCAAAGGCCCGGATGTCGCTTACAGAG
TCACCAAAGACGCGCAGCTCAGCGCACCCACCATGCCTCCAGCCCCCAGCTCGCCCCGACCCATCCTGTTTCGTGA
ATAGGTCTCAGGGGTGGGGGAGGGACTGCCAGATTTGGACACTATATTTTTTTCTAAATTCAACTTGAAGATGT
GTATTTCCCTGACCTTCAAAAAATGTTCCAAGGTAAGCCTCGTAAAGGTCATCCACCATCACCAAAGCCTCCG
TTTTTAACAACCTCCAACACGATCCATTTAGAGGCCAAATGTCATTCTGCAGGTGCCTTCCCGATGGATTAAAGG
TGCTTATGTTTTGTGAGTTTTAAGTAAATATTTGTATTGTATTGTTATAAATGTTAAGTGTGCCTGGCTTTCAA
TCATGCACGGAAACCCAGTCTCAGTCCACGGACAGAATGGGCGAGGCATGGATTCTGGGTTCAGTACCGTTCT
GATTAGAAATAGGAAGTCTCCCCACCCCGCCCTGGCCAAGAACGTGCAATAAATTGGAAGTTTGCCTCGGGGCA
GCAAGAATTTATGCTGCCATTGAAAAGCAGGTACAGTGCCCTTTTCAGACAGTTTTTGATTGCTCTAGACTT
TTTTTTTTTTAATAGGGAAAAAATTTGATAATTTCTTTTTCTACATGCACTTAAGACTAAAACACAGGTTTG
GATTAATTTTATTTGCTTCCTTTTTCCGCTTTTCTTCCCGCAGAGCCTGATGGGAGAATGTCCAGGGCAGGGAAA
CCACATTTTTGTAGGTGATACTCAATGAAAATTGGTGCTTATTTTTTACACTTCTCTCTTGTGGCTCTCTTGT
GGTGCTATCTATCTGTTTTAAGGTCTCCTTGAAGGCGCACTGGGGACCCTGGCCATGCCTCGTTCTCCCTGCTTT
CTTTATCCTGTTATTGCCTCCACAGTCTGTTGCCAAGGACTCTAAGATCAATGCACGTCACTTTCTTTTCCACTG
GGCAGGATAGCCAAGCACACTCCCTCCTGCGCTCTCCCGCCCCGGTGCGTCCACTCCCGAGGGCTGTTATGAGGA
CTGGGTGTGCTTACTTGATTTGAAAACACACACAAGCAATAAAAAGCCTCTTCTGCAATTGTCTGTGGTGTGAC
CATAGCAGATTATATTTGGTTCCTGAATGTTTGTGGTGCTAATTTCTGTGTTTGTTCGAAGCCGTTTCAAGTATGC
CATGCGCTGCCTCGGTAGATGGAGTAATGTACAATGAAGTCCATGAGTCTCTCCAGGGCTGCCTGCAGCACGTCT
TTTCCAAGTAGCCTATTTGGATTCCCATCTCAAATGTCTGGATGCGAGCGTCAGCGGCTCCAGAGCTCGGGGCG
GGTGAGGTCCCCCTTTGGGGAACCCCTTTCTGCCATCGAGGTGCGGGGGCTGCCGTCTGTGGGCAGGAGGACCCG
AGGGGCAGCCAGGAAAGGCGATCTCTTCACTGTGAAAAGTTGCCCGGGTGCGAGCGCTTTTCTTCTACCATGGG
AAATGCAGGCTGGGCCCTTTGGGGTGAGCCTGCGGGGCTCTGGTGCTGTCCCCGACCCCCACCACCAGAAATGC
AGTTCCAGCTTAGGAAGCCACAAACAAGCCACCCAGGAGGAACAAACACCGCCAGCGTGGATTTTCCAAATTTT
CCTGGAAGTAAGTCTCGCTCTTTGCCAAAGAAAAGTCTGGCTTGGAGAGTCTCTGGAGCCCAGGATGCCAGCATG
TGCCAATGACTGTACCTTCATCTCTTCAAAAGAAAAGCCATAGCCGAGGACTGTCCCGCGACCCCGTGGACTG
CGTCTAGGTCAATGTGATTCTGTTTTCTATTTCTCATCCCATCCAATTTGTCTTTTTCTCCTGTCATTTTCTTCTC
TGTGGTCCCTTCAAAGTTGTTATAATTTGTACTGAAGTTCAAAATGTGTCCCGTTCTCCCCAGACCACTCTAGCC
ACAGTATATTGCAATAAAATTAATTTCTTATATTTGCAGAAATTTCTTTTGGTGTAATTTTATTTTTTCTCTCAAT
ATATATAATTGGACAAACGCTGGCAAAAAGAAAAAATGGTAAGCAAAAACCCAGATAAAGTTTCGAGGACAT
CAGGCCTTTTGAATACAATGTCAAATGACACATTGTACGGTTTCAAAAATCCGCTAGACATGTCATAAGTTTT
AACTGTAATGCCAGGAAAGGATATCTTAAAAATATTCTAAACTTGTGTAACAAAGGAATAATTAAGTGAATAGT
TTTTCAATAAATCGAGTTGGGTGTTTCCACCGT

WO 2004/030615

PCT/US2003/028547

3074/6881
FIGURE 2834

CAGGGAGTTGAGAACTGTGGCACAAGGCGAGAGCTGGTTTCCTCTGCCCTGTTAGAGCTGGGGGACTCTTCAGA
GTCAAAGGCCAGAGAGC**ATCG**AGCTGAGTGGAGCCACCATGGCCCCGGGGGCTCGCTGTCCTGCTAGTCTTGTTCC
TGCATATCAAGAACCTGCCCTGCCCAGGCTGCGGACACATGTCCAGAGGTGAAGGTGGTGGGCCTGGAGGGCTCTG
ACAAGCTCACCATTCTCCGAGGCTGCCCGGGGGCTGCCCGGGGCCCCAGGGCCAAAGGGAGAGGCAGGTGTCATTG
GAGAGAGAGGAGAACGCGGTCTCCCTGGAGCCCCCTGGAAAGGCAGGACCAGTGGGGCCCCAAAGGAGACCGAGGAG
AGAAGGGGATGCGTGGAGAGAAAGGAGACGCTGGGCAGTCTCAGTCGTGTGCGACAGGCCCACGCAACTGCAAGG
ACCTGCTAGACCGGGGGTATTTCTGAGCGGCTGGCACACCATCTACCTGCCCCGACTGCCGGCCCCCTGACTGTGC
TCTGTGACATGGACACGGACGGAGGGGGCTGGACCGTTTTCCAGCGGAGGATGGATGGCTCTGTGGACTTCTATC
GGGACTGGGCCGCATACAAGCAGGGCTTCGGCAGTCAGCTGGGGGAGTTCTGGCTGGGGAACGACAACATCCACG
CCCTGACTGCCCAGGGAAGCAGCGAGCTCCGTGTAGACCTGGTGGACTTTGAGGGCAACCACAGTTTGCTAAGT
ACAAATCATTCAAGGTGGCTGACGAGGCAGAGAAGTACAAGCTGGTACTGGGAGCCTTTGTGGGGGCAGTGCGG
GTAATTCTCTAACGGGCCACAACAACAACCTTCTTCTCCACCAAAGACCAAGACAATGATGTGAGTTCTTCGAATT
GTGCTGAGAAGTTCAGGGAGCCTGGTGGTACGCCGACTGTCATGCTTCAAACCTCAATGGTCTCTACCTCATGG
GACCCCATGAGAGCTATGCCAATGGTATCAACTGGAGTGCGGCGAAGGGGTACAAATATAGCTACAAGGTGTCAG
AGATGAAGGTGCGGCCCGCC**TAG**ACGGGCCAGGACCCCTCCACATGCACCTGCTAGTGGGGAGGCCACACCCACA
AGCGCTGCGTCGTGGAAGTCACCCATTTCCCCAGCCAGACACACTCCCATGACGCCCACAGCTGCCCCTTTGCC
CCCAGCTCAGTCAAGCCGCCACATGCCACAACTCACCAGAGGGAGAATTATGTTTCTAAATATGTTTACTTTG
GGACAGAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3075/6881
FIGURE 2835

MELSGATMARGLAVLLVLFLHIKNLPAQAADTCPEVKVVGLEGS DKLTILRGCPGLPGAPGPKGEAGVIGERGER
GLPGAPGKAGPVGPKGDRGEKGMERGEKGDAGSQSCATGPRNCKDLLDRGYFLSGWHTIYLPDCRPLTVLCDMDT
DGGGWTVFQRRMDGSVDFYRDWAAKYQGFGSQLGEFWLGNDNIHALTAQGSSELRVDLVDFEGNHQFAKYKSKV
ADEAEKYKLVLGAFVGG SAGNSLTGHNNNFFSTKDQDNDVSSSNCAEKFGAWWYADCHASNGLYLMGP HESY
ANGINWSAAKGYKYSYKVSEMKVRPA

WO 2004/030615

PCT/US2003/028547

3076/6881
FIGURE 2836

GC GCGGGGGAGCCATTAGGAGGCGAGGAGAGAGGAGGGCGCAGCTCCCGCCAGCCCAGCCCTGCCAGCCCTGC
CCGGAGGCAGACGCGCCGGAACCGGGACGCGATAAAATATGCAGAGCGGAGGCTTCGCGCAGCAGAGCCCGCGCGC
CGCCCGCTCCGGGTGCTGAATCCAGGCGTG GGGACACGAGCCAGGCGCCGCGCCGGAGCCAGCGGAGCCGGGGC
CAGAGCCGGAGCGCGTCCGCGTCCACGCAGCCCGCGCGCCAGCACCCAGGGCCCTGCATGCCAGGTCGTTGG
AGGTGGCAGCGAGACATGCACCCGGCCCGGAAGCTCCTCAGCCTCCTCTTCCTCATCCTGATGGGCACTGAACTC
ACTCAAAATAAAAGAGAAAACAAAGCAGAGAAGATGGGAGGGCCAGAGAGCGAGAGGAAGACCACAGGAGAGAAG
ACACTGAACGAGCTTCCCTTGTTTTGCCTGGAAGCCCACGCTGGCTCCCTGGCTCTGCCAGGATGTGCAGTCCA
AATCCCAATCCAGCAGTGGGGTTATGTCGTCCCGCTTACCCTCAGAGCCCTTCTCCTGGTGCTGCCAGACGATC
AGCCAGTCCCTCCTGGAGAGGTTCTGCATGGCCTCTAGGAGAGAAGTTTTCTTGGCCCCAGGAAGGCCTGGTGGA
GGGTGGTGGTTGTGCACTGTTGCTGGACAGATGCATTCAATCATGTGCACACACACACACACATGCACACACA
GGGGAGCAGATACCTGCAGAGAAGAGCCAACCAGGTCCTGATTAGTGGCAAGCTGCCCCACAAAGGGCTATGCCT
GTGTCTTATTGAGACACCTTGGCAAAGAGATGGCTGATTCTGGGTGGTCTGGACATGGCCGCACCCAAGGGCCC
TCCAAGCCTTAATGGCACCTGAAGCCTCCATGCCAGGCCAAAAGATGCTTTTCCTCCCTAAAAAAAAAAAAAA
AAAAA

WO 2004/030615

PCT/US2003/028547

3077/6881
FIGURE 2837

MPGRWRWQRMHPARKLLSLLFLILMGTELTQNKRENKAEKMGGPESERKTTGEKTLNELPLFCLEAHAGSLALP
RMCSPNPNPAVGLCRPAYPQSPSPGAAQTISQSLLERFCMASRREVFLAPGRPGGGWWLCTVAGQMHSFMCTHTH
THAHTGEQIPAEKSQPGPD

WO 2004/030615

PCT/US2003/028547

3078/6881
FIGURE 2838

TGGTTACTGAGATGGTGAAAACCAGGGGAGACCTGGGGGACATCACAAGCTTGGTTCCTACCAGGTTTATGGAGC
CGTACATCTTTGGGAGCCGCCTGGACCACGACATCATCGACCTGGAACAGACAGCCACGCACCTCCAGCTGGCCT
TGAAC TTCACCGCCACATGGCCTACCGCAAGGGCATCATCTTGTTTATAAGCCGCAACCGGCAGTTCTCGTACC
TGATTGAGAACATGGCCCGTGACTGTGGCGAGTACGCCCACACTCGCTACTTCAGGGGCGGCATGCTGACCAACG
CGCGCCTCCTCTTTGGCCCCACGGTCCGCCTGCCGGACCTCATCATCTTCCTGCACACGCTCAACAACATCTTTG
AGCCACACGTGGCCGTGAGAGACGCAGCCAAGATGAACATCCCCACAGTGGGCATCGTGGACACCAACTGCAACC
CCTGCCTCATCACCTACCCTGTACCCGGCAATGACGACTCTCCGCTGGCTGTGCACCTCTACTGCAGGCTCTTCC
AGACGGCCATCACCCGGGCCAAGGAGAAGCGGCAGCAGGTTGAGGCTCTCTATCGCCTGCAGGGCCAGAAGGAGC
CCGGGGACCAGGGGCCAGCCACCCTCCTGGGGCTGACATGAGCCATTCCCTGTGATGTTCACTCTCCTCCCAA
GCAAACCACAGCCAGCTGGGTTGGTGGGACAGCCAGGCCAGATGACCTGATTCCAGCAAAAATAAACTCAGATT
TGGGCAAAATG

WO 2004/030615

PCT/US2003/028547

3079/6881
FIGURE 2839

CTGGTCCAGGCACAGCCTTGCCACAGTCCAGAGAAGGCCACCTCTAATGGGGCCTGCAGGCATTGTGGCCACAGG
AGGAAAGGGCCGGGGGGCCCCCTCTCCCCACTCCTGGGGCAGCTCCCTTGCCCTTCCCCAGCCTCAGGCACTCTCA
TCATCTCCGTTGGCCTCTTCTGGGGGCTCTTGGGGTTCATCTCCAGGGTGGAAAACCTGGAGGGCCCCCTCCTGGC
AGAGTCAAGGATGGGGTCAGCGAGACCCCATCCCCCTCAGCCCTCAACCTTTGTTTCACCCAGAGCCCCCTCTGAAT
CCTGGGAGCTGGCTCTTTCCACTCCCCGAGGGGGCCCTCAGGCCACCCCTGGCTGTCCCAGCATGCCCCCGCGG
CTTCTGCGCTGCACCCCTTCCCGTCCCTCCCTGCTCCTCATGGTCACTAGTGCTGCTTATCCACTGGGTCATCCC
CTCGGCCAGGGCCCCCTCTGCCCTGGAAGCCCAGCAAGCGCCCACTCGTAGCTCCTCAGCGGGTCCTCGCCGGCC
TGTGCCAGGTGCAGGGGCCAGTGGGAGGACAACAGGAGCCACGCAGGCCATCAGCGCAAGAGCAAACGCACATGG
CAACGTTGGTCCGCTCAGCCACTGGTTCTGTGGTGAACGGTGGATGTCTGCACTGTGACATCAGCTGAGTACGA
GAACTGCCGGTTGCGGCTTATAACAAGATGATGCCCTTGCGGTAGGCCATGTGGGCGGTGAAGTTCAAGGCCAG
CTGGAGGTGCGTGGCTGTCTGTTCCAGGTCGATGATGTCGTG

WO 2004/030615

PCT/US2003/028547

3080/6881
FIGURE 2840

MAPAASALHPSRPSLLLMVTSACLSTGSSPRPGPLLPWKPSKRPLVAPQRVLAGLCQVQGPVGGQQEPRRPSAQE
QTHMATLVRSATGSVVERWMSAL

WO 2004/030615

PCT/US2003/028547

3081/6881
FIGURE 2841

GGGAAGCGACGAGTCCGGGACGCCCAGCGCGGGCCCGGAGCAGGGGGAAGGGAAGTGCGGCTCGGTTCGGCGCGGG
TGGAGGGGGCGTGAGGCCGCCCTACGGTGGCCGTCGAGGGACGGCGCTACGGCTCCCACGCTAGGCCAAACGCCT
CCGGCGGGCGCGCCCCGAGAGCCCCCTTACCTGCAGGGCGACCCAGCCGGCGACGCGTGAACACGCCCTCAGCC
GCCTTGCCAGCGCCCCAGCCGCGCGCCCCAGCACCATGCGGCCGCCCTGCGCACGGAGCCCCAGGGACAGGGG
CACCCGCGAGGCCCGGCCCTAGCACCGCCGCGGCCCGGAGGTCCGGGACGCCGGCGCCGCGCGGAGAGGGCA
CCGGGCGGACGCCTCCCCCAGGGTCACTGCGGGCTCCAGGCCCTAGGCGCCCATGACCCCTACGCCAACAGCC
GCCTGGACACCGCCGCCGCTGCGACCTAGCGCCGCCCGCGGGGCCCAATGCCGGTCATGCCATTCCGC
GGCGGGTGCCTCTTCCACGGCCCCGACACCACCTGCCTGCATGCGGCCTGCGGGCCCGTGCAGCGCTCCACC
TGGCCCGCACCAAGTACAACAACCTTCGACGTGTACATCAAGACGCGCTGGCTGTACGGCTTCATCCGCTTCCTAC
TCTACTTTAGCTGCAGCCTGTTCACTGCGGCGCTCTGGGGTGCCTGGCCGCCCTCTTCTGCCTACAGTACCTGG
GCGTTCGCGTCTGCTGCGCTTCCAGCGCAAGCTGTGCGTGTCTGCTGCTGCTGGGCCGCCGGCGCGTGGACT
TCCGCTGGTGAACGAGCTGCTCGTCTATGGCATCCACGTACCATGCTGCTGGTTCGGGGGCTGGGCTGGTGCT
TCATGGTCTTCGTGGACATGTGAGGGCCGTGGGTGCGAGCTTGATGTATCGTCCCGGCTGTGGCTGTGTTCTCT
CCATGGGTGGGGTGGCCAGCGCCTTCCCTTCGCCCATCCCCAGGCAGTGCCTGCTGCCGGCGCCACAGGAGA
GAAAAGAAAGGGCTGAGACTTCTGTGATGGGGGCGCGGACACCACCCCTAGGCTGGCTTCCTGGACCCACCCTCC
CCGTATGCACTCTCAGGGGACGCGCCACCTGCCGGTGGCTCCTGCTCACATGTCTTCGGGTGCTACTGCGGGGT
GGGCCCTCCGTTCGCTCTCTGTGGGCTCTCTCCAGGACCACAGCTGCCAGGGACTTTAGACATCACCTTGGG
AGGCCCTGGACACAGAGGGCTGTGTGCCAGGAGCAATTCCGAGGGGGGCCCTCCTGGCTGCACAGCCCCCTTC
TGCGTGCCCTGGCCCCAGCCCCAGCCAACGGGACACGGAAGGCTCCCTCGCTGACACACCACACTGCCACAAAG
CTGCTTACTCTGCCCTGGGCCGCTGAGGCTGGCACTGCCCGGGACACCCTGTGTGTGTCATCCTGAGGGGC
TGTGTGGGTCTGAGTCCCCAGCCAGCCTTCAGGGTCCCTTGATTGTGTAGATGCAGTCTAGCGGGGGGCGCG
AGAAGGGCTCAGGTGGGAGGGGCTCAGCAGGCTCCAGCTCAGGGGCTGGCCTGGGGGGAACCTGGGAGCCAG
GGGCTGACTCCAGCAACACTGGCCTGTCTGCCTGTTCTGGGAGGGCTGTGAGGATGTCTTGCAATGCTCTGGAT
TTCTGCGGAGGCACCTCCATTCTTTCTGGCTTTTTTTCGGGGGAGGGCTTTGGGCCTCTTTCTTTGAGGGAAC
ACCGTCAAAGAAAGCCTGGGAGATCGAGGCTTCAGTGAGCCAGGATGGAACGCGTGTCCCAAGTGTCCGGAGCA
GGCGGCAGAGGCCTCAGTGCGGCAACACAGCCCCAGAGCCTGTGTGGCACCAGCAGCATCTTAGAGCCCCAGGT
ATATGCTGAGATCTTATCTCACGCTGTCTCCAGTGTCTGGGGGGCCCAATGATGGCACAGGGGCGAGGTGGGCT
GGAGGGGCGCAGATGCCGTGTTCAGGGAGGGTGGCCACCATGGGCCGAGGTCTCACCCAGGACCCCTTGCTCTG
CTCCTCAGCCTTGCACTCACGGCAGCACTATGGTGGACTGCCCATGGCCGTGTGACCTTTGGGGGCAAGTGGGAGG
GCGCCCTGAATAATGATTGCAAGGACAACAGGCAGAGGCTACCCTAGAGCAGGACACAGGGTGTGGTACTGACAA
CCCTAGTGTACCTCAAATCCATGTCCCCACACTCTGGGCATGGGTGGGACTTGTGACCCTACCCTGTGAGGCGG
ACCAGTGGCCCAGGAGCCATGAGGACAGTTGTGTGCCACTGGAAGAGAACTTTTTGAAAAACCTAAATCAGGT
AGAGAAAGCAAAAAATCTCTGGCCGTAAACCGTGCTCTTAATTTATCGGCAGCTTCTGTGGATGACCTCTGATG
AGCCCCGGGCTGCGTCCACGCCCTGGGCAGGTAGGCGGGAGCTTCCCTGCGTGGGCCTCATTTCTTGCTGCAGAGA
ATCTTTTGACTAAGTCATGCTGTTTCTCAAAGAAGCTTTGTTTTTTGTTAACGTATTACTCAGAGTCACCCAA
GCCTCTTGCTGAGGGTGAAGGTGGGACGGGAGGCGGGAGGGGGCTGGTGGTGCCGCTCGTGCGGTGTCAACGCT
GCAGGGAGTTGTGGCACCTTGGTGCCCTCTGAGCACCTGGCCGCGCTGCTGTCCCGGTGCCTGTGAAATTGCTCA
TGCCATGACCCACCTGCATTAAACCTATTTTTTTAATGTG

WO 2004/030615

PCT/US2003/028547

3082/6881
FIGURE 2842

MLWISAEAPPFLSGFFCGGGLWASFFEGTPSKKAWIEIASVSQDGNACPKCPEQAAEASVRQTQPQSLCGTSSIL
EPQVYAEILSHAVLQCLGGPNDGTGAGGLEGRRCCLCSGRVATMGRGLTQDPLLCSALQSRQHYGGLPMAV

WO 2004/030615

PCT/US2003/028547

3083/6881
FIGURE 2843

CTGGGCTGGTGCTTCATGGTCTTCGTGGACATGTGAGGGCCGTGGGTGCGAGCTTGATGTATCGTCCCGGCCTGT
GGCTGTGTTCTCTCCATGGGGTGGGGTCGGCCAGCGCCTTCCCTTCGCCCATCCCCCAGGCAGTCGCTGCTGCCCCG
GCGCCACGGAGAGAAAAGAAAGGGCTGAGACTTCTGTGATGGGGGCGCGGACACCACCCCTAGGCTGGCTTCCT
GGACCCACCCCTCCCCGTATGCACTCTCAGGGGCGAGCGCCACCTGCCGGTGGCTCCTGCTCACATGTCTTCGGGT
CGTACTGCGGGGTGGGCCCTCCGTTCCGCCTCTCTGTGGGCCCTCTCTCCAGGACCACAGCTGCCAGGGACTTTAG

ACATCACCCCTGGGAGGCCCCCTGGACACAGAGGGCTGTGTGCCCAGGAGCAATTCCGGAGGGGGGCCCTCCTGGCT
GCACAGCCCCCTTCTGCGTGCCCTGGCCCCAGCCCCAGGTATATGCTGAGATCTTATCTCACGCTGTCCTCCAGTG
TCTGGGGGGCCCCAAATGATGGCACAGGGGCGAGGTGGGCTGGAGGGGCGCAGATGCCTGTGTTTCAGGGAGGGTGGC
CACCATGGGCCGAGGTCTCACCCAGGACCCCTTGCTCTGCTCCTCAGCCTTGCACTCACGGCAGCACTATGGTGG
ACTGCCCATGGCCGTGTGACTTTGGGGGCAAGTGGGAGG

WO 2004/030615

PCT/US2003/028547

3084/6881
FIGURE 2844

MGGVGQRLPFAHPPGSRCCPAPTERKERAETSVMGARTPPLGWLPGPTLPVCTLRGSAHLPVAPAHMSSGRTAGW
ALRSASLWASLQDHSCQGL

WO 2004/030615

PCT/US2003/028547

3085/6881
FIGURE 2845

CTCGTGGACACCTGCCACCGGGCCATGAGGACCACCTTCCTCCACATCTCCAAGACCCCCCAGGAGAACGGGGCC
ACTGCGGGGTCTGGCGTGCAGCCGGCCCAGTAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAA
GCCGATGGCTGGAGGATGGGCAGAGGGGACTCGCGCCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGC
TTGCGGCTGTGGCCCGCTGGTGGGCTGAGCCACAAGGCCCCCGATGGCCCAGGAGCAGATGGGAGGACCCGAGG
CCAGACGCACACTGTCCGAGCCCTCTGCTCAGCCGCCTGGGACCCACCAGGGTGCAGCTGGGCTCCAGGGTCCAG
CCCACAAGCTGCATCAGGCTCTCTGGGAGAGGAGGGGCCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGG
CCACAGGGAGCCGGGAATCGGGGCCTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCG
TTGCTGTTTTTTTATAAACACACTCTTGGAAGTGGCTGGGGAGCTGTGGTCACTCACAGGGCGGGCAGGTGACCA
GGGCGGTGGAGGCGACGCTGTGTCTTCCCAGCTGCCCTGCCTAGAGGCCCCAGGGTGCAGGCACCGCCACCCACCC
GTGTTCCCTATCCAGGAGTGGACCCACATCACCT

WO 2004/030615

PCT/US2003/028547

3086/6881
FIGURE 2846

CGCGGGGAGAGAAGCGGGAGCGGGAGCGGGAGCGAGCTGGCGGCGCCGTCGGGCGCCGGGCGGGCCATGGAGCTG
TGGCCGTGTCTGGCCGCGGCGCTGCTGTTGCTGCTGCTGCTGGTGCAGCTGAGCCGCGCGGCGGAGTTCTACGCC
AAGGTCGCCCTGTACTGCGCGCTGTGCTTCACGGTGTCCGCCGTGGCCTCGCTCGTCTGCCTGCTGCGCCACGGC
GGCCGGACGGTGGAGAACATGAGCATCATCGGCTGGTTCGTGCGAAGCTTCAAGTACTTTTACGGGCTCCGCTTC
GAGGTGCGGGACCCGCGCAGGCTGCAGGAGGCCCGTCCCTGTGTCATCGTCTCCAACCACAGAGCATCCTGGAC
ATGATGGGCCTCATGGAGGTCCTTCCGGAGCGCTGCGTGCAGATCGCCAAGCGGGAGCTGCTCTTCTGGGGCCC
GTGGGCCTCATCATGTACCTCGGGGGCGTCTTCTTCATCAACCGGCAGCGCTCTAGCACTGCCATGACAGTGATG
GCCGACCTGGGCGAGCGCATGGTCAGGGAGAACCTCAAAGTGTGGATCTATCCCGAGGGTACTCGCAACGACAAT
GGGGACCTGCTGCCTTTTAAAGAGGGCGCCTTCTACCTGGCAGTCCAGGCACAGGTGCCCATCGTCCCCGTGGTG
TACTCTTCCTTCTCCTCCTTCTACAACACCAAGAAGAAGTTCTTCACTTCAGGAACAGTCACAGTGCAGGTGCTG
GAAGCCATCCCCACAGCGGCCCTCACTGCGGCGGACGTCCCTGCGCTCGTGGACACCTGCCACCGGGCCATGAGG
ACCACCTTCCTCCACATCTCCAAGACCCCCCAGGAGAACGGGGCCACTGCGGGGTCTGGCGTGCAGCCGGCCCCAG
TAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAAGCCGATGGCTGGAGGATGGGCAGAGGGGAC
TCCTCCCGGCTTCAAATACCACTCTGTCCGGCTCCCCAGCTCTCACTCAGCCCAGGAAGCAGGAAGCCCCCTTC
TGTCAGTGGCCTCAGACACAGGCCCCTGGTGTCCCTGCAGGGGGCTCAGCTGGACCCTCCCCGGGCTCGAGGGC
AGGGACTCGCGCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGCTTGCGGCTGTGGCCCGCTGGTGGG
CTGAGCCACAAGCCCCCGATGGCCAGGAGCAGATGGGAGGACCCCGAGGCCAGACGCACACTGTCCGAGCCCT
CTGCTCAGCCGCCTGGGACCCACCAGGTGCAGCTGGGCTCCAGGGTCCAGCCCACAAGCTGCATCAGGCTCTCT
GGGAGAGGAGGGGCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGGCCACAGGGAGCCGGGAATCGGGGC
CTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCGTTGCTGTTTTTTTATAAACACACT
CTTGGAAGTGG

WO 2004/030615

PCT/US2003/028547

3087/6881
FIGURE 2847A

GGGGAGAACACTTCTTTGTCTGGGATTCCAACCAGCTCTGTCTTAGCTTGTCTCTGCCTAGCAGTGTTGCCCAA
AGTAATTTTCCACAAGGTTCTGGTGCTTCCGAAATGGTTTCTAATCAGCCTGCTAATTTGCTGGTTCAACCACCA
TCCCAGCCAGTTCCAGAGAACTTGGTTCCAGAAAGTCAAAAGGATCGTAAGGCAGGAAGTGCTCTTCCCGGATTT
GCTAATAGCCCTGCTGGAAGCACAGTGTGGTGTTAGTTCCACCTGCACACGGCACCCCTGGTGCTGATGGTAAT
AAGGCAAACCATTCCAGTCATCAGGAAGACACTTACGGAGCCCTAGACTTTACCTTAAGCAGGACTTTGGAAAAT
CCTGTAAACGTGTACAACCCGTCCCATTCTGACAGCCTCGCTTCTCAGCAAAGTGTTGCCAGTCATCCCAGACAA
TCTGGGCTTGGGGCGCCTAACCTTGACCGTTTTATCAGCAGGTACAGAAAGATGCCCAGGGCCAGCCTGGCCTC
GAAAGAGCCCAGCAGGAGCTGGTGCCACCCAGCAACAGGCTTCTCCCCACAACCTACCCAAAGCCATGTTTTTCG
GAGCTGTCAAATCCAGAAAGTCTGCCCGCACAGGGACAGGCCCAGAACTCAGCACAGTCACCAGCAAGTCTGGTT
CTGGTTCGACGCGGGTTCAGCAGCTGCCCCCTCGGCTCCTCAGTCTCTAGCGTGTCTCTGGTGTCCAGTGGCTCC
GGCCAGGCAGCTGTGCCGTTCAGAGCAGCCGTGGCCACAGCCAGTGCCTGCACCTGCCCCCGGCCACCCGCTCAG
GACCTGGCCGCTACTACTACTACCGGCTTTGTACGATGCCTACCAGCCTCAGTACTCTTTGCCGTACCCACCG
GAGCCTGGCGCAGCCTCCCTCTATTACCAGGATGTCTACAGCCTCTATGAGCCTCGATACAGGCCCTATGATGGT
GCTGCGTCTGCTTACGCCCAGAACTACCGCTATCCCGAGCCGAGCGGCCAGCTCCCGAGCCAGCCACTCCTCG
GAACGGCCACCTCCCAGGCAAGGATATCCTGAAGGATACTATAGTTCCAAAAGTGATGGAGCAGTCAGAGCGAT
TACTATGCAAGCTATTACTCCAGCCAGTACGATTATGGAGATCCAGGTCACTGGGATCGTTACCACTACAGTGCT
AGAGTCAGGGACCCCGCACCTATGACCGGAGGTATTGGTGTGATGCAGAGTATGACGCATACAGGAGAGAGCAC
TCTGCCTTCGGGGACAGGCCCGAGAAACGTGACAACAACTGGAGGTACGATCCTCGCTTCACGGGGAGTTTTGAC
GATGACCCCGATCCGCACAGAGACCCCTTATGGGGAAGAGGTGGACCGGCGCAGCGTCCACAGCGAGCACTCGGCA
CGGAGCCTGCACAGCGCACACAGCCTGGCCAGCCGCCGACAGCCTCAGCTCCCACTCGCACCCAGAGTCAGATT
TACAGAAGCCACAATGTGGCTGCCGGTTCTACGAGGCCCGCTTCTCCAGGCTCCTTTCACGGCGATTTTGCC
TACGGCACCTACCGCAGCAATTTACGAGTGGCCCCGGCTTCCAGAGTATGGCTACCCTGCCGACACCGTCTGG
CCTGCCATGGAGCAAGTTTCATCAAGACCAACTTCTCCTGAAAAATTTTCAGTGCCTCATGTCTGTGCCAGGTTT
GGCCCTGGCGGTTCAGCTTATCAAAGTGATTCCCAATCTGCCTTCAGAAGGACAGCCGGCCTTGGTGGAGGTCCAC
AGCATGGAGGCCTTGCTGCAGCACACGTCTGAGCAGGAGGAGATGCGGGCGTTCCCGGGACCCCTGGCCAAAGAC
GACACCCATAAGGTGGATGTCATTAATTTTGCACAGAACAAAGCTATGAAATGTTTGAGAATGAAAACCTTAATT
GACAAAGAGTCTGCAAGTCTTCTTTGGAATTTTATTGTTCTCTATGACAGACAAAATGGGACCGTGGTAGGGACC
GACATTGCGGAGCTTCTGTTACGAGACCACAGAACAGTGTGGCTTCTTGGGAAGTCGCCCCAATGAAGCAAACCTG
ATTGATTTTCAGAAATGAGGCAGTGGAGCAGGTGGAAGAGGAGGAGTCTGGTGAGGCCCAGCTCTCTTTCTCACT
GGTGGTCCGGCGGCTGCCGCCAGCTCGCTCGAGAGAGAGACCGAGAGGTTTCAGGGAGCTGTTGCTGTATGGCCGT
AAGAAGGATGCTTTGGAGTCTGCAATGAAGAATGGCCTGTGGGTCACGCTCTGCTACTTGAAGTAAGATGGAC
AGCCGGACACACGCCCGAGTCATGACCAGGTTTGCTAACAGCCTCCCAATCAACGACCCCTCTGCAGACAGTCTAC
CAGCTCATGTCCGGACGGATGCCTGCCGCGTCCACGTGCTGTGGAGACGAGAAATGGGGAGATTGGAGGCCGCAC
CTCGCCATGGTCTTGTCCAACCTGAACAACAACATGGACGTCAGTCCAGGACGATGGCTACCATGGGCGACACT
CTGGCTTCAAGGGGCTCTTGGATGCGGCCCACTTCTGCTACCTCATGGCCAGGCGGGATTTGGTGTTTACACG
AAGAAAACCTACAAAGCTTGTCTTAATCGGATCCAATCACAGTTTGCCATTCTTAAAGTTCGCAACCAACGAAGCA
ATCCAGAGGACGGAAGCCTATGAGTACGCCCAGTCCCTGGGTGCCGAGACCTGCCCCCTGCCTAGTTTCCAGGTG
TTTAAGTTCTACTCTCTGCGCCTGGCGGAAATGGGGCTGGCCACGCAAGCCTTCCACTACTGTGAGGCCATC
GCGAAGAGCATCCTGACGCAGCCGCACCTGTATCCCGGTGTTGATCAGCCAGCTTGTGCAGATGGCTTCCCAG
TTACGACTCTTCGATCCCCAGCTGAAAGAGAAGCCAGAAGAGGAGTCTTGGCCGCACCCACGTGGCTGGTTTAC
CTGCAGCAGGTGGAGCGGCAGATTAAGGAGGGGGCTGGAGTATGGCATCAGGATGGAGCCCTCCCGCAGCAGTGT
CCTGGCACTCCGAGTTCCGAGATGGAGCAGTTGGACAGGCCAGGACTCAGTCAGCCAGGAGCCCTGGGGATCGCC
AACCTCTGCTGGCGGTGCCTGCACCGAGCCCTGAGCACTCGAGCCCGAGCGTGGCGCTGCTGCCCTCAGCTCCG
CAGACGCTCCCTGACGGCCCATTTGGCCAGTCTGCCAGAGTGGCGATGTTCCAGTGCCACTGCCCCGGGGCCC
CTGGAGCCGGGTCTGGCTGTGTGACCCAGGGCTGCACTTGGCTTCTTGGAGCCCTCCGGGCTGGCCTCCCA
CCTGGTGTGCCACCTCTGCAGGAAAGGAGACACTTGTCTCAGGAAGCCAGGAGCCAGACCCAGGGATAGTGCCG
CAGGAGGCGCCTGTTGGAAACTCACTTTCAGAGCTAAGCGAAGAAAAATTTGATGGAAAAATTTGCTAATCTGACC
CCCTCGAGGACGGTGCCAGACTCGGAGGCCCCCCAGGGTGGGATCGTGCCGACTCGGGTCCCACGCAGCCACCT

WO 2004/030615

PCT/US2003/028547

3088/6881
FIGURE 2847B

CTGTCTCTCTCACCCGCTCCCGAAACAAAGAGACCCGGACAGGCAGCCAAAGAAAGAAACGAAGGAACCTAAGAAG
GGTGAATCCTGGTTCTTTCTGTTGGCTACCTGGAAAGAAAAAGACAGAAGCTTATTTGCCAGATGACAAGAACAAA
TCGATTGTTTGGGATGAAAAGAAAAACCAGTGGGTGAATTTAAATGAGCCAGAAGAGGAGAAGAAAGCCCCGCCC
CCACCTCCAACCTCGATGCCCAAGACTGTGCAAGCTGCCCCGCTGCCCTCCCAGGGCCTCCTGGAGCCCCCGTG
AACATGTACTCTAGAAGAGCAGCAGGAACCAGAGCTCGCTACGTTGACGTCCTGAACCCAAGCGGGACCCAGCGG
AGCGAGCCGGCTCTCGCTCCTGCGGACTTTGTGCTCCACTCGCGCCACTCCCAATTCTTCTAACTTGTTCTGTG
CCAACCCCACTGAGACCCAGGGACGTTGCGGACGGAATGATGGCCTCCTCGCTCTCTCATCCCCAGATGCAGAA
GAACCACAGCTTCCAGACGGGACTGGCAGGGAAGGGCCTGCAGCAGCTAGGGGCTGGCCAATCCAGAGCCTGCC
CCAGAGCCCAAGGTTTTAAGCTCTGCAGCGTCACTCCCTGGCTCTGAACTCCCCTCCTCCAGGCCTGAGGGTTCC
CAGGGAGGAGAGCTTTGCGCTGTAGTTCAATGAGTTCATTATCACGTGAAGTGAGCCAGCATTTTAATCAGGCT
CCTGGCGACCTCCCTGCTGCAGGGGGCCCTCCAGCGGGGCCATGCCCTTCTACAACCTGCTCAGCTGGCACAG
GCCTGCGCCACCTCCGGGAGCTCAAGGCTAGGGAGGATTGGCCAGAGGAAGCACCTGGTGCTGAACTAGGCTTGC
CCTGCTGTGAACTTGCACTTGGAGCCCTGACGCTGCTGTTCTCCCCGAAGAACCCGACCGACCTCCGCGATCTCC
GTCCCGCCCCCAGGGAGACACAGCAGTGACTCAGAGCTGGTGCACACTGTGCCTCCCTCCTACCGCCCATCGT
AATGAATTATTTGAAAATTAATTCACCATCCTTTAGATTCTGGATGGAAAGACTGAATCTTTGACTCAGAAT
TGTTTGCCGAAAAGAATGATGTGACTTTCTTAGTCATTTAGGATGATTTAAGGATATAGTATTCCTGGTCATTTA
AGAATGTTTCAATCATTGAAGCCGGAGCTGTCTCTGCCACAGGAGACCATGGTCGGTAGTAACCAGGGCCTCT
CCAAGCCCAGCTGTGAGTCACTGCCAGTGAGTCCCGCGCTTCCTTTAAGGTGCTGGGAGCAAAGAGAGGGTGAC
TGAGGCAGACCCCAACCCCTGCTCTGCACCATCTGGGCCCTCGCCGTGTTTGAACCTGGCTGAATGAGTGGAGGG
CGCTGTGTTCTCAATCAGCGCTCCGAGGAGCCGTGGGGTTCTTCGGCATTAGTTCACGGTTTTTGAGAGAGGC
CTTAGTTACTGCAGTGAATTTCTTTCTGTTGCAAAGACGCTTCCAGCCTCACTTTACTTTCTGTGGCCTGATGA
GGACCATGGGTGATTTTGTGTACCCAAAGCGCTGGGGACTGCCACCGTGTGGCCAGTCACTGGGAAGGAGCCC
CAGAGAGCCGGCTGTCTGACATGATGGCTCAGGGTGGTCATCCAGGTTGAAAAGTACCGTGTGATGTTTGATTT
GGGCTTCATTTCTGTGTAGGAGCACGGTTAGACTCACTGTTAAGGAAGCTGGATGCACTTCTCTAAAGGCTGC
ACTTTCCGTGAGCACTTTTCTGTTGTAATCCACATGACCCACTTTCTCCCCTGGGGGACGTTGGTTCAGAGGTT
GGTAGCACTTGGGGAGAGTATCTTAACACAGTTTCTTGACAGCAGCTCTGGAACCTAGTATTTCTGCCCCGAGTT
TTGCCACACTGAGACTTTGAGTAGCTCCTGGTGGACTCAACCTGTTCAACTCAGAGACGGGCCTCCTCTCACTG
ATGCAAAGCTTTAAGGCTTCTCTGACTGTTCTGAACTCTTCGTATTCTTGTCAAGTCTAAAGAGACTGAAGAAA
AGATTTAAATACTAATAAAAAATCAGTAGATAATTTCTGTAGGTTCTGCTGGAGGAATACAAAGTGTGTTGGTGT
TAAATTTAAGTGTAGAAATTGTAGAAATGTGGAATTAGCACAGATCCTTCCTGGCTTTCTGTTTTCACTTGATCATT
TAGCCCAGACCACCCAGGATGTTTTCCAAAATGTTCCACAGGCGTGTCCCGCTGGATCCATTTGTCTTGTCACT
TGGAGAAAGGCCAGTCCCTGTGACGGGGCAGCCCTCTCTGTCCCTCGGTCAGCTCGTGTGAATCCTGGGACCTCT
TCCGCTCGGCTCTGCCCGCTGTTCTGGGGTCGACTGCCACGACTTTTGATTCAAGAAGCTTCTCCAGGCGGGAG
CGGCTATTTTTCTAAATGAGAATTGTTACATTGCAAATTGTTGAATAAAATATTTTGCCTCCTTCAA

WO 2004/030615

PCT/US2003/028547

3089/6881
FIGURE 2848

METLCAPQVCPLPLNSTTEAVHMLPHAGAPPLDVTYPAPEKRPSARTQGPVKCESPATTLWAQSELPDFGGNVLL
APAAPALYVCAKQP PPVQPPEEAMSGQQSRNPSSAAPVQSRGGIGASENLENPPKMGEEEALQSQASSGYASLL
SSPPTESLQNPPVLIAQPDHSYNLAQPINFSVLSNSHEKNQSWREALVGDRPAVSSWALGGDSGENTSLSGIPT
SSVLSLSLSPSSVAQSNFPQSGGASEMVSNQPANLLVQPPSQPVENLVPEQKDRKAGSALPGFANSFAGSTSVV
LVPPAHGTLVPDGNKANHSSHQEDTYGALDFTLSRTLENPVNVNPSHSDSLASQQSVASHPRQSGPGAPNLDRF
YQQVTKDAQGQPLERAAQQLVPPQQQASPPQLPKAMFSELSNPESLPAQQAQNSAQSPASLVLDAGQQLPPR
PPQSSSVSLVSSSGQAAPVSEQPWPQVPALAPGPPPQDLAAYYYRPLYDAYQPQYSLPYPPPEPGAASLYYQD
VYSLYEPRYRPYDGAASAYAQNRYRYPEPERPSSRASHSSERPPPRQGYPEGYSSKSGWSSQSDYYASYSSQYD
YGDPGHWDYHYHSARVRDPRTYDRRYWCDAEYDAYRREHSFAGDRPEKRDNNWRYDPRFTGSFDDDPDHRDPYG
EEVDRRSVHSEHSARSLSAHSASLRSLSLSSHSHSQSIYRSHNVAAGSYEAPLPPGSFHGDFAYGTYRSNFSG
PGFPEYGYPADTVWPAMEQVSSRPTSPEKFSVPHVCARFGPGGQLIKVIPNLPSEGQPALVEVHSMEALLQHTSE
QEEMRAFPGLAKDDTHKVDVINFAQNKAMKCLQENENLIDKESASLLWNFIVLLCRQNGTVVGTDAEALLRDHR
TVWLP GKSPNEANLIDFTNEAVEQVEEESGEAQLSFLTGGPAAAASSLERETERFRELLEYGRKKDALESAMKN
GLWGHALLLASKMDSRTHARVMTRFANSLPINDPLQTVYQLMSGRMPAASTCCGDEKWDWRPHLAMVLSNLNNN
MDVESRTMATMGDTLASRGLLDAAHFCYLMQAAGFGVYTKKTKLVLIGSNHSLPFLKFATNEAIQRTEAYEYQAQ
SLGAETCPLPSFQVFKFIYSCRLAEMGLATQAFHYCEAIAKSILTQPHLYSPVLISQLVQMASQLRLFDLPQLKEK
PEEESLAAPTWLVLHQQVERQIKEGAGVWHQD GALPQQCPGTPSSEMEQLDRPGLSQPGALGIANPLLAVPAPSP
EHSSPSVRLLP SAPQTLPDGPLASPARVPMFPVPLPPGPLEPGPGCVTPGPALGFLEPSGPGLPFGVPPLOERRH
LLQEARSPPDGPVQEPVGNLSLSELSEENFDGKFANLTPSRTVPDSEAPPGWDRADSGPTQPPLSLSPAPETKR
PGQAAKKETKEPKKGESWFFRWLP GKKKTEAYLPDDKNKSIWDEKKNQWVNLNEPEEEKKAPPPPTSMFKTVQ
AAPPALPGPPGAPVNMYSRRAAGTRARYVDVLNPSGTQRSEPALAPADFVAPLAPLIPSNLFVPTDAEEPQLP
DGTGREGPAAARGLANPEPAPEPKVLSSAASLPGSELPSSRPEGSQGGEAPGDLPAAGGPPSGAMFFYNPAQLAQ
ACATSGSSRLGRIGQRKHLVLN

WO 2004/030615

PCT/US2003/028547

3090/6881
FIGURE 2849

AGACGCAAGATGCGGGCTGTGGTGCTGGCGGCGACGCGGTTGCTGCGGGGCTCGGGTTCTTGCGGGCTGTTTCGCGG
CTGAGGTTTGGACCTCCTGCGTACAGACGGTTTAGTAGTGGTGGTGCCTATCCCAACATCCCCCTCTCTTCTCCC
TTACCTGGAGTACCCAAGCCTGTTTTTGTACAGTTGATGGACAGGAAAAGTTTGAAACCAAAGTAACCACATTG
GATAATGGGCTTCGCGTGGCATCTCAGAAATAAGTTTGGACAGTTTTGTACAGTAGGAATTCTTATCAATTACAGGA
TCGAGATATGAAGCGAAATACCTTAGTGGAAATTGCTCACTTTTTGGAAAAATTGGCATTTCGTCTACTGCTCGA
TTTGACAGCAAAGATGAAATTCTGCTTACGTTGGAAAAAGCATGGGGGTATCTGTGACTGCCAGACATCAAGAGAC
ACCACCATGTATGCTGTGTCTGCTGATAGCAAAGGCTTGGACACGGTGGTTGCCTTACTGGCTGATGTGGTTCTG
CAGCCCCGGCTAACAGATGAAGAAGTCGAGATGACGCGGATGGCGGTCCAGTTTGAGCTGGAGGACCTGAACCTG
CGGCCTGACCCAGAGCCACTTCTCACCAGATGATTTCATGAAGCGGCTTACAGGGAGAACACAGTTGGCCTCCAC
CGTTTCTGCCCCACAGAAAACGTAGCAAAGATCAACCGAGAGGTGCTGCATTCTACCTAGGAACTACTACACT
CCCGACCGCATGGTGCTGGCCGGCGTGGGCGTGGAGCAGGAGCATCTGGTGGACTGTGCCCGGAAGTACCTCCTG
GGGGTCCAGCCGGCTGGGGGAGCGCAGAGGCCGTGGATATTGACAGATCTGTGGCCAGTACACTGGGGGGATT
GCCAAGCTAGAAAGAGACATGTCCAATGTCAGCCTGGGCCCCGACCCCCATCCCCGAGCTCACGCACATCATGGTT
GGACTGGAGAGCTGCTCCTTCTGGAGGAGGACTTCATCCCCTTTCAGTGTGAACATGATGATGGGCGGAGGT
GGCTCCTTCTCGGCTGGTGGGCCCCGGCAAGGGCATGTTCTCCAGGCTCTACCTCAACGTGCTCAACAGGCACCAC
TGGATGTATAACGCGACCTCCTACCACCACAGCTACGAGGACACTGGCCTCCTTTCATCCATGCCAGCGCCGAC
CCAAGACAGGTTTCGAGAAATGGTAGAAATCATCACAAGGAGTTTATTTTAATGGGCGGAACCGTGGACACGGTG
GAGCTGGAACGAGCCAAGACGCAGCTGACATCAATGCTCATGATGAACCTGGAATCCAGGCCTGTGATCTTCGAG
GATGTGGGGAGGCAGGTGCTGGCCACTCGCTCCAGAAAGCTGCCGCACGAGCTGTGCACGCTCATCCGCAACGTG
AAGCCGGAAGATGTGAAGAGAGTCGCTTCTAAGATGCTCCGAGGGAAGCCGGCAGTGGCCGCCCTGGGTGACCTG
ACTGACCTGCCCACGTATGAGCACATCCAGACCGCCTGTGAGTAAGGACGGGCGCCTGCCCAGGACGTACCGG
CTCTTCCGGTAGAACCGCTCCCCGGCCTGACAGACCCAGGGAGCTGCAGCTGGAGCCCCGTTCCCGTGCGTGTAG
TTTGACACGAATTTAGTCTAAAAAGCTGTCTGGTTGTATAAACGGTGCAAACAATGTGCCCACAGCACCCACGC
GGTTTGCATTCTTTTGAACTCAATGTGCCGATCAGTGGAGTCAGTATCGAGCCTGACCACCGCAAGCCAGGAAG
CAGGTGAAGTGCCGAGCGCTGGAGTGCAGCGTGCCACGAGGAGGGCGGTGCGGTGCTTCCCTCCTCGGGCTGTGGG
CACATGGGGCCCCGAGGTTCTTGGAGGAGCCCTGAGCTGGGAGGCAGCAAAGGCTGACCTATCAAAGCCTCCC
GGAGGCCACCGTGCTGGGTACCAGGACTCACCTCTGACAAGCAGGAGAAGGTAAGGGCCCCGGTCAGCTCCAAGGA
GCGCGCTCCACGCGCGTGCACACAGCTTCCCTGGTAATAAGAGCTGGCATCTTTCTT

WO 2004/030615

PCT/US2003/028547

3091/6881
FIGURE 2850

MAAVVLAATRLLRGSGSWGCSRLRFGPPAYRRFSSGGAYPNIPLSSPLPGVPKPVFATVDGQEKFETKVTTLDNQ
LRVASQNKFGQFCTVGILINSGSRYEAKYLSGIAHFLEKLAFSSSTARFDSKDEILLTLEKHGGICDCQTSRDTTM
YAVSADSKGLD TVVALLADVVLQPRLTDEEVEMTRMAVQFELEDNLNLRPDPEPLLEMIHEAAYRENTVGLHRFC
PTENVAKINREVLHSYLRNYYTPDRMVLAGVGVEHEHLVDCARKYLLGVQPAWGSAEAVDIDRSVAQYTGGIAKL
ERDMSNVSLGPTPIPELTHIMVGLESCSFLEEDFIPFAVLNMMMGGGGSFSAGGPGKGMFSRLYLNVNLRHHWY
NATSYHHSYEDTGLLCIHASADPRQVREMVEIITKEFILMGGTVDTVELERAKTQLTSMMLMNLESRPVIFEDVG
RQVLATRSRKLPHLELCTLRNVKPEDVKRVASKMLRGKPAVAALGDLTDLPTYEHIQTALSSKDGRLPRTYRLFR

WO 2004/030615

PCT/US2003/028547

3092/6881
FIGURE 2851

GGCGGCCGAGCGGCGGGCGACGGGGCGGGCGACGGGGCGGGCGACGCGGGCCGCGGCACGGGCGGAGCCGGGG
CCATGGAGCCGCCGCTGCCGGGCTAGGCAGGTCGTGCCCCGCCGGGCCGGCGGCGATGTCGGGCTACCAGCGCCG
CCCCGGCGCCACCCCGCTGTCCCGAGCCCGGAGCCTCGCCATTCCCAGCGTCCAGCGTTCTATGAGCGCCGGTC
TTGTCTCCCCAGCTAAATTGTGAGCGCCCCCATGGCAGGGACCTGGACTCCCCCTTCTTCGGCATTTCGGCCGGC
CTTTATGTGCTATGTGCCAGCCCGGTGCTGGCTTCCGTGGGAGACACAGATTTTGGCTATGGAAGGGGAAATG
TTCTAAGCAGAGCCCGTCAGGAGCCACGGGACACATTTTGGAGATGACAGATTTGAAGATCTGGAAGAGGCAAA
TCCATTCTCTTTTAGAGAGTTTCTGAAGACCAAGAACCTCGGCCTCTCGAAAGAGGATCCGGCCAGCAGAATTTA
TGCAAAGGAAGCCTCGAGGCATTCCCTGGGACTTGACCACAACCCCCACCCTCCCAAACGGCGGGTATGGCCT
GGAGTATCAGCAGCCATTTTTTCGAGGATCCGACAGGGGCTGGTGACCTCCTGGATGAGGAGGAGGATGAGGACAC
CGGATGGAGTGGGGCTACCTGCCGTCCGCCATCGAGCAGACTCACCCCGAGAGGGTCCCTGCCGGCACGTCGCC
CTGCAGCACATACTTTTCTTTTTTCTCCACCCCGTCGGAGCTGGCAGGGCCTGAGTCTCTGCCCTCGTGGGCGTT
GAGTGACACTGATTCTCGCGTGTCTCCGGCCTCTCCGGCAGGGAGTCTAGCGCAGACTTTGCGGTTTCATGGAGA
GTCTCTGGGAGACAGGCACCTGCGGACGCTGCAGATAAGTTACGACGCACTGAAAGATGAAATTTCTAAGCTGAG
AAGAAAGCTGAATGAGGTTTCAGAGCTTCTCTGAAGCTCAAACAGAAATGGTGAGGACGCTTGAGCGGAAGTTAGA
AGCAAAAATGATCAAGGAGGAAAGCGACTACCACGACCTGGAGTCGGTGGTTCAGCAGGTGGAGCAGAACCTGGA
GCTGATGACCAAACGGGCTGTAAAGGCAGAAAACCACGTCGTGAAACTAAAACAGGAAATCAGTTTGCTCCAGGC
GCAGGTCTCCAATTCCAGCGAGAGAATGAAGCCCTGCGGTGCGGCCAGGGTGCCAGCCTGACCGTGGTGAAGCA
GAACGCCGACGTGGCCCTGCAGAACCTCCGGGTGGTCATGAACAGTGCACAGGCTTCCATCAAGCAACTGGTTTC
CGGAGCTGAGACACTGAATCTTGTTGCCGAAATCCTTAAATCTATAGACAGAATTTCTGAAGTTAAAGACGAGGA
GGAAGACTCTTGAGGACCCCTGGGTGTTCTCAGCATGAAGCTCCGTGTATACCCTGAGGTCAACACCGCTCGATC
TAAATGTGCAGTTGTGTCTTAAATATGCAGTCTTACCCAGAGTAAAGTGTGATCGCAAGAGTCCAGTGTCTGT
GCCCTCAGCCAGTTCTTGCCACCACAATGGGAGCAGCCCTGGCCGAGTTGTCTCTGTGGTTTCTATGCAGCCCT
TCTTGCGGAAATTCCTGCGATCTTATAGATTCTAATGAGCTCTTGGAAGACATTGTCATAAAAGCCAGTGATTTT
AAGAAAAAGAGTGGTTCTGGAATCAATGTTTTCCAGTCCCATCCCAGAACATCAGTTGTAAGATAAGTACAATTG
GTTGTCTTGAATTCATAAGTAGAACAACACTAAATGTGCCTCTGAGATGGCCACCCCGGGCAGGGACCTGTGC
CTTCCGCCGATGCTCAGGGCTCCCTCTGGCTCCCGGGTCACTCTTGTGGCCCCAGTGGGTGGTCCCTGCAGTCAT
GGCCTGAGTGCAGGGGGCCACCGCGTGGCTGCTGTCTCTCCTCCGGGACCCACGGGGACCAAGGTCACACGT
TCCGTGCTGTGAAGCTGTCCAGATGTGCCTCTTGGCTGGGGGTCTGGTGGACGTTTCAAGTGGCATTGTTGTAC
AATGCAGGTTAGAATTCAGGAATTTCAAGTATGTGCCCGGTCTGTCAGGTCCCAGTTGCCTTTCTGACGGCCCC
CCTCAGAGGGACGGCGATGAGCACTAAATGCTTTTTTGAATTTTCTATAGATTTTTTTTAAACTTTTTTTT
CCTCCTGTTCCAATTGATAGCTTCTTATTTAATAAATCTGTAGTTCACCGC

WO 2004/030615

PCT/US2003/028547

3093/6881
FIGURE 2852

CTGTGTAGGGCATGGACACAGGGAGCTCATGGCAGGGCTGACACAGGGTGTGGTGGGCACAGGGACAGGAGGCAC
GGGAGGCTTCCCGGGATGTCTGGGAAGTGTTCAGGCCAAGGCTGGGGAGGCTGGCCAGGGCAGGTGACGGACA
GAGGCCTGGACTGGGGTAGCACCCATGAGAGGGGAGAAGTCCGGGGCAGTCGGCGGGTGCCGAGGGAGCATCCCG
AGGGCCCCGTCTTCGGACGAGGAGTGCTTCTTTGACCTGTTGACCAAGTTCCAGAGCAGCCGATGGACGACCAG
CGTTGTCCCTGGACGATGGCCAGGCCGGGGCTGCCGAGGCCACGGCCGCCCCACCCTGGAGGACAGGATCGCC
CAGCCCTCGATGACGGCCTCGCCCCAGACCGAGGAATTCTTCGACCTCATCGCCAGCTCCCAGAGCCGCCGGCTG
GACGACCAGCGGGCCAGCGTGGGCAGCCTGCCGGGGCTGCGAATCACCCACAGCAATGCAGGGCACCTCCGAGGC
CACGGCGAGCCCCAGGAGCCGGGGGACGACTTCTTCAACATGCTCATCAAGTACCAGTCCTCCAGGATCGATGAC
CAGCGCTGCCCACCACCTGACGTACTGCCCCGGGGCCCTACCATGCCGGACGAGGACTTCTTCAGCCTCATTAG
AGGGTGCAGGCTAAGCGCATGGACGAGCAGCGGTGGACCTCGCCGGGGGCCCGGAGCAGGGGGCAGGCGGGCCG
CCCGAGCCCCAGCAGCAGTGCCAGCCTGGTGCGAGCTAAGGCCCTGTGCCACCGCCAGGCCACCCTGCCCCCA
CTCCTGGACGCCGGTCTCACAGTCACAGCCACGTCTCTCCGAGGCCATTGCCGAGGACAGGCACTGGGCATGCAG
CCCCACGGCCTCCCCGACCCAGGGCGACAGGCTCAGGCCAAGCTGCCCGTGGTGGGAGGGCGTGCTTCCATCCCG
GGCTGGCCCCCATGCGCCCTCAGCTTCTCTCCCTTCTGCCCTGCCGACGGCCGACGGGGCCTTCGGCATGTGGC
CCCGACCTGGTGCTGTGACACTCCCGCATCCTCTCCCCCAAGCCCTTCCCGTCTGCCCTGCCCTGCCAAATGTG
AAACCCTGCTGTCTCCCCACCCTCCCCAAAGGTGTCTCTGAGCCGCTCTTGGGGCCACCAAGGACAGGGCCAT
GTTCTGTCCCCCAGAGCTGGTCTTGGGATGGCCGTGTGACAGGCATGCTCCACCCCTCCAGCTTCGTCTCTGGG
CAGGGCTCCCTCCAAGCCTGTCTCCCCACTCCCCGGCCAGAGGTGAGCAACCACAGAAGGCCCCCAGACCACGC
ATGGCAGACCAGGCTGCAGTGGCAGCCCTGAGGTGCCCCCGCCGAGTCCCAGGGCCCTGCAGGGGCCTCGACAG
GAGCCGGGCCTATCTCTAAAGCAGAGGGAATGGCTGGGCATGAACCTCGACATTCCAAAACCCCAAGCCAGGAAA
AAGGGCAGGGCCTGGTCTTAGGGATGCTTACTGGCAGCAAGAGCAGTGCCAGTCAGGGTGGGAGGTAGCACCAG
GCTCTGTGACCCTCACCCAAGTGGGGGGGTGGTCAAGTGGGAGGCTTCACTCAGCTCAACCTGCGAGA
CCCCCATATGAGAACCCCCCTCTCCACCAGCTGGGGGAGATGACATCACTGCTCTCTCCATGGGGAGGGGGC
TCACAGGGCACCAAGTTCGGGATCCTAGGACTGGCAGGACCTGCTGGAGCCTGAGATGGGCCCCAGGGGCCCTGAG
GTTGCCTCCTCTGTCCAGACCCAGCCTTGGCACCTCCCAAGACTGCCAAGGGCCCTACCATGGCCCCACAGCCC
CCAGGGCTGGCAGTTCCATCTAGGAGGGTGCCCTTAGGCCCCACTCTCAGGCTAGGATGGAGAGGCAGATCTGGG
CCTGGTGAGGTGACCTGCTTCTGGAGGGGCAGGGCCGCACCCGAGAGCAGGGACAGGTGCCCGAACACAGGGTCT
CCAGGACGTAGCGCCCCCGCATACTTGAATGTATGTGCGTATTTATTGCTCACGTCTGTGCCATGTTGTCAAT
GGGTCTTTTCCAACCAAGAGGTACATTTGTTTTTCTGTTTTTCTGAAAAATAAAGTCGGCCAAAGTGAG

WO 2004/030615

PCT/US2003/028547

3094/6881
FIGURE 2853

MALSFLPSAPAAAGRTGPSACRPRPGAVRLPHPLPQALPVLPCPAKCETLLSPPPSPKVSLSRLLGPPRTGPCSVP
PELVLGWPCDRHAPPLQLRPGAGLPPLSPHSPARGQQPQKAPQTTHGRPGCSGSPEVPPAESQGPAGASTGAGP
ISKAEGMAGHELHRHSKTPSQEKGQGLVLGMLTGSKSSAQSGWEVAPGSVTLTQVGGWSVEAGEASLSSTLQTPHM
RTPLLPAGGDDITALSMGRGLTGHQVRDPRTGRTCWSLRWAPGA

WO 2004/030615

PCT/US2003/028547

3095/6881
FIGURE 2854

CTCGTGGACACCTGCCACCGGGCCATGAGGACCACCTTCCTCCACATCTCCAAGACCCCCAGGAGAACGGGGCC
ACTGCGGGGTCTGGCGTGCAGCCGGCCCAGTAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAA
GCCGATGGCTGGAGGATGGGCAGAGGGGACTCGCGCCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGC
TTGCGGCTGTGGCCCGCTGGTGGGCTGAGCCACAAGGCCCCCGATGGCCCAGGAGCAGATGGGAGGACCCGAGG
CCAGACGCACACTGTCCGAGCCCTCTGCTCAGCCGCCTGGGACCCACCAGGGTGCAGCTGGGCTCCAGGGTCCAG
CCCACAAGCTGCATCAGGCTCTCTGGGAGAGGAGGGGCCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGG
CCACAGGGAGCCGGGAATCGGGGCCTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCG
TTGCTGTTTTTTTATAAACACACTCTTGGAAGTGGCTGGGGAGCTGTGGTCACTCACAGGGCGGGCAGGTGACCA
GGGCGGTGGAGGCGACGCTGTGTCTTCCCAGCTGCCCTGCCTAGAGGCCAGGGTGCAGGCACCGCCACCCACCC
GTGTTCCCTATCCAGGAGTGGACCCACATCACCT

WO 2004/030615

PCT/US2003/028547

3096/6881
FIGURE 2855

CGCGGGGAGAGAAGCGGGAGCGGGAGCGGGAGCGAGCTGGCGGCGCCGTCGGGCGCCGGGCGGGCC**ATGG**AGCTG
TGGCCGTGTCTGGCCGCGGCGCTGCTGTTGCTGCTGCTGCTGGTGCAGCTGAGCCGCGCGGCGGAGTTCTACGCC
AAGGTCGCCCTGTACTGCGCGCTGTGCTTCACGGTGTCCGCCGTGGCCTCGCTCGTCTGCCTGCTGCGCCACGGC
GGCCGGACGGTGGAGAACATGAGCATCATCGGCTGGTTCGTGCGAAGCTTCAAGTACTTTTACGGGCTCCGCTTC
GAGGTGCGGGACCCGCGCAGGCTGCAGGAGGCCCGTCCCTGTGTCATCGTCTCCAACCACCAGAGCATCCTGGAC
ATGATGGGCCTCATGGAGGTCCTTCCGGAGCGCTGCGTGCAGATCGCCAAGCGGGAGCTGCTCTTCTGGGGCCC
GTGGGCCTCATCATGTACCTCGGGGGCGTCTTCTTCATCAACCGGCAGCGCTCTAGCACTGCCATGACAGTGATG
GCCGACCTGGGCGAGCGCATGGTCAGGGAGAACCTCAAAGTGTGGATCTATCCCGAGGGTACTCGCAACGACAAT
GGGGACCTGCTGCCTTTTAAGAAGGGCGCCTTCTACCTGGCAGTCCAGGCACAGGTGCCCATCGTCCCCGTGGTG
TACTCTTCCTTCTCCTCCTTCTACAACACCAAGAAGAAGTTCTTCACTTCAGGAACAGTACAGTGCAGGTGCTG
GAAGCCATCCCCACCAGCGGCCTCACTGCGGCGGACGTCCCTGCGCTCGTGGACACCTGCCACCGGGCCATGAGG
ACCACCTTCCTCCACATCTCCAAGACCCCCCAGGAGAACGGGGCCACTGCGGGGTCTGGCGTGCAGCCGGCCCCAG
TAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAAGCCGATGGCTGGAGGATGGGCAGAGGGGAC
TCCTCCCGGCTTCCAAATACCACTCTGTCCGGCTCCCCCAGCTCTCACTCAGCCCAGGGAAGCAGGAAGCCCCCTTC
TGTCAGTGGCCTCAGACACAGGCCCCCTGGTGTCCCCTGCAGGGGGCTCAGCTGGACCCTCCCCGGGCTCGAGGGC
AGGGACTCGCGCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGCTTGCGGCTGTGGCCCGCTGGTGGG
CTGAGCCACAAGGCCCCCGATGGCCAGGAGCAGATGGGAGGACCCCGAGGCCAGACGCACACTGTCCGAGCCCT
CTGCTCAGCCGCTGGGACCCACCAGGGTGCAGCTGGGCTCCAGGGTCCAGCCCACAAGCTGCATCAGGCTCTCT
GGGAGAGGAGGGGCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGGCCACAGGGAGCCGGGAATCGGGG
CTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCGTTGCTGTTTTTTATAAACACACT
CTTGGAAGTGG

WO 2004/030615

PCT/US2003/028547

3097/6881
FIGURE 2856

MELWPCLAAALLLLLLLVQLSRAAEFYAKVALYCALCFTVSAVASLVCLLRHGGRTVENMSIIGWFVRSFKYFYG
LRFEVRDPRRLQEARPCVIVSNHQSILDMMLMEVLPERCVQIAKRELLFLGPVGLIMYLGGVFFINRQRSSTAM
TVMADLGERMVRENKLVWIYPEGTRNDNGDLLPFKKGAFYLAVQAQVPVVPVYSSFSSFYNTKKKFFTSGTVTV
QVLEAIPTSGLTAADVPALVDTCHRAMRTTFLHISKTPQENGATAGSGVQPAQ

WO 2004/030615

PCT/US2003/028547

3098/6881
FIGURE 2857

GGCGCCTGGCGCACCTGGTGCTCTTCTGCCCTTCTCCAAGCGCCTGCAGGGCCGGCTCCCAGGCCTCAGGGTCC
GCTGCATCTTCTGGCCTGGCTGGGCGTCTTTGCAGGCAGCTGGCTGGTGTACGTGCACTACTCGTCCTACTCGG
AGCGCTGTCGCGGCCATGTCTGCCAGGTGGTCATTTGTGACCAGTACCGCAAGGGGATCATCTCGGGCTCCGTCT
GCCAGGACCTGTGTGAGCTGCATATGGTGGAGTGGAGGACCTGCCTCTCGGTGGCCCCGGGCCAGCAGGTGTACA
GCGGGCTCTGGCGGGACAAGGATGTAACCATCAAGTGTGGCATTGAGGAGACCCTCGACTCCAAGGCCCGGTCTCGG
ATGCGGGCCCCCGCGGGAGCTGGTACTGTTTGACAAGCCCCACCGGGGCACCTCCATCAAGGAATTCCGGGAGA
TGACCCTCAGCTTCCTCAAGGCGAACCTGGGAGACCTGCCTTCCCTGCCGGCGCTGGTTGGCCAGGTCTCTGCTCA
TGGCTGACTTCAACAAGGACAACCAGGTGTCCCTGGCGGAAGCCAAGTCCGTGTGGGCCCTGCTGCAGCGTAACG
AGTTCTGCTGCTGCTGTCCCTGCAGGAGAAGGAGCACGCCTCCAGACTGCTGGGCTACTGTGGGGACCTCTACC
TCACCGAGGGCGTGCCGATGGCGCTGGCACGCGGGCGCCCTTCCACCCCTGTTGCGCCCACTGCTGCCGCTG
CCCTGCAGGGTGCTCTCCAGCAGTGGCTGGGGCTGCGTGGCCTTGGCGGGCCAAGATCGCCATCGGCCTGCTGG
AGTTCTGAGGAGCTCTTCCACGGCTCTTACGGGACTTTCTACATGTGTGAGACCACACTGGCCAACGTGGGCT
ACACAGCCACCTACGACTTCAAGATGGCCGACCTGCAGCAGGTGGCACCCGAGGCCACCGTGCGCCGCTTCTGCTG
AGGGCCCGCTGCGAGCACAGCACCAGTGCACCTACGGGCGCGACTGCAGGGCCCCGTGTGACAGGCTCATGA
GGCAGTGCAAGGGCGACCTCATCCAGCCCAACCTGGCCAAGGTGTGCGCACTGCTACGGGGCTACCTGCTGCCTG
GCGCGCCCGCCGACCTCCGCGAGGAGCTGGGCACACAGCTGCGCACCTGTACCACGCTGAGCGGGCTGGCCAGCC
AGGTGGAGGCCCATCACTCGCTGGTGTCTAGCCACCTCAAGACTCTGCTCTGGAAGAAGATCTCCAACACCAAGT
ACTCTTGAAGGGGAGTGAGGGGCTGGCCAACCTTCCCTGGAGCTGGCCAGGTGCCAGGGTCCAACCCCTCCCTCA
AGGAATCCTGTCAGAAGATGTGAAATGCAACTGTGTTGCAAAATCACTCCCCTACCGTCAGGGCTCTGGATTCCA
GCACCACAGACATGAGACCCAGCTCGGAGCAAAGGCGGACATGGACATCCCGGCAGGAGAGTCTCCAAGGGGG
TTTGTACTCTGAAGAACGTAATGTCAATAAACAGCTTTTATGTAATGCCAGGGCTG

WO 2004/030615

PCT/US2003/028547

3099/6881
FIGURE 2858

MVEWRTCLSVAPGQQVYSGLWRDKDVTIKCGIEETLDSKARSDAAPRRELVLFDKPTRGTSIKEFREMTLSFLKA
NLGDLPSLPALVGQVLLMADFNKDNRVSLAEAKSVWALLQRNEFLLLLSLQEKEHASRLLGYCGDLYLTEGVPHG
AWHAAALPPLLRPLLPPALQALQQWLGPWPWRAKIAIGLLEFVEELFHGSYGTTFYMCETTLANVGYTATYDFK
MADLQQVAPEATVRRFLQGRRCEHSTDCTYGRDCRAPCDRLMRQCKGDLIQPNLAKVCALLRGYLLPGAPADLRE
ELGTQLRTCTTSLGLASQVEAHHSVLVSHLKTLLWKKISNTKYS

WO 2004/030615

PCT/US2003/028547

3100/6881
FIGURE 2859

CTCTGCGTGCGCCGGAGGCTGCCGTGGCGGGTGGGCCGCTGACTTCTCCTCCCGGCCAGTTCTCGAGCGCCTCA
CCGGGCTTCGCCCTGAGCCTCGCTCTCGCTGGCGCTGCGCGGCCTAGGGGACTGGGCTGCTGGCCTCCGGGTGC
GGGGTGGGGGAGGCTCCGACCTGGGGCGTCTTGCCGCGCGAGCCGCGGGATGGGGGCCCGGGCCGCGGAGGAG
GCGCCGCTGGTGTGTCCCTTGGTGGAGAGGGCGCTGCCGGCCCTGCGCGGTTTCCAGCCAGGAAGCTTCGGGAAG
CCTGGACGTCTGCTCACTGGAGATGACACGTGCGTGGGGTGTGGCATTCTTGTTATTTAACACGGGAAGGAGGT
GACTTCGCCGTGTGATGGACTTCCAGTGTGAGCACTGGCCAGAGTGACCAGGCTGACCAGCACCAGCCCTGATCCA
GATGCAGAGGCCAGGATGTGGGCCCAGCCCTGTGCCAGGAGGCTGGCTGGAATAAAGGTACAGATAGAGGCCTCA
CCCCCTCTGGGACCACTGGCACTCAGGGTGTTCAGCCTCAGAGCCCACCTGCCCCCAGGGCCACAGCTGCATC
TCCTGCCCTGCTGTCATTACAGGGATGGGCAGGCTGGCATGGGGGCAGCCGCTGCCCTGCCTGGGTGTTGCTGT
GTATTCCTGCCGGCCAGGGGCCACTGCCAGGACCACGCCTCCCTTTTCATATCCCGATTCTTAAGTTCTGCTATT
GTGGTATTCTGGTGGAGAAAAAAGAACC GCGTGGCTGTTTTTGAAGTGCCTGGAACCTAAGACCCTGAATTCCTT
TCCCCC AAGGGGAAAATCTATATGGAAAACATTTATTTTAAAATACAGGATGAAGTGAATTAAGATTTAAA
TGCACATTTCTTTAAGGATAATATTTCTGTGTGGCAAAATTTGAGAGTAAATTGGTCTTGAATGGAATGGATTG
TCTTGACTCACACATTGCGGAGCAGAGCCCCCCTGAAGAAAGGTGTTGCTGTGGTGGGATCTTCCCACGAGGGT
CCTTGCCTGTTCTCCTAGGGGATGGTTGCTGGGTGCCCTGGGCTACTGGGGAGAGCGTACGGGGCTGGAGAAGAT
GGCCATTCCTGGGCTGTTTCCTAGGGAATGAGTTGTACATCTCATGGCTGGATTTTGTAATCAGTTTTTAAAA
TACCGCATATATCTGTTTTCTTACTGG

WO 2004/030615

PCT/US2003/028547

3101/6881
FIGURE 2860

GGCACGAGGCCGAGCCCTGCCAACCATCGTGAACCTGGGTCTGTCCCGGGTGGACGACGCCGTGGCTGCCAAGCA
CCCCGGGACTCGGGGAGTATGCCGCATGCCAGTCACACGCCTTCATGAAGGGCGTTTTACCTTCGTACAGGCAC
CGGCATGGCCTTTGGCTTGCGAGATGTTTCATTCAGAGGAAGTTTCCATACCCCTTTGCAGTGGAGCCTCCTAGTGGC
CGTGGTTGCAGGCTCTGTGGTCAGCTACGGGGTGACGAGAGTGGAGTCGGAGAAAATGCAACAACCTCTGGCTCTT
CCTGGAGACCGGGCAGCTCCCCAAAGACAGGAGCACAGATCAGAGAAGCTTACGSAGAGCTCCAGCAGGGGCACAGA
GGATTGGGGGCAGGAGGAGTCTGGAACACAGCCTTCATGCCCCCTGACCCAGCCCGACCTCCCCACACCCTAG
GGTACCCAGTCGTATCCTCTGTCCGCATGTGTGGCCAGGCCTGACAAACACCTGCAGATGGCTGCTGCCCCAAC
CTGGGACCTGCCCAGGAGGTTGGAGCAGAAAGGGCTCTCCCTGGGGTGGTGTCTCTCTAGGGTATTGGGATG
CATGTTCTGCACTGCCAGCAGAGAGGGTGTGTCTGGGGGCCACCACCTATGGGACACGGGGTCGAAGGGGCCTGT
ACACTCTGTCAATTCCTTTCTAGCCCTGCATCTCCAACAAGTCCAAGGTGACAGCTGGTGCTAGGGGCGTGGGG
TTAATAAATGGCTTATCCTTCTCTCCAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3102/6881
FIGURE 2861

MVNLGLSRVDDAVAAKHPGLGEYAAACQSHAFMKGVFTEFTGTGMAFGLQMF IQRKFPYPLQWSLLVAVVAGSVVS
YGVTRVESEKCNNLWLFLETGQLPKDRSTDQRS

WO 2004/030615

PCT/US2003/028547

3103/6881
FIGURE 2862

GGGGACTCCGGGAGGAGGAACATGGCCGTGGCGGACCTCGCTCTCATTCTGATGTGGACATCGACTCCGACGGC
GTCTTCAAGTATGTGCTGATCCGAGTCCACTCGGCTCCCCGCTCCGGGCTCCGGCTGCAGAGAGCAAGGAGATCG
TGCGCGGCTACAAGTGGGCTGAGTACCATGCGGACATCTACGACAAAGTGTCGGGCGACATGCAGAAGCAAGGCT
GCGACTGTGAGTGTCTGGGCGGCGGGCGCATCTCCCACCAGAGTCAGGACAAGAAGATTACGTGTACGGCTATT
CCATGGCCTATGGTCCTGCCCAGCACGCCATTTCAACTGAGAAAAATCAAAGCCAAGTACCCGACTACGAGGTCA
CCTGGGCTAACGACGGCTACTGAGCACTCCCAGCCCGGGGCTGCTGCCTCCAGCAGCCACTTCAGAGCCCCGCC
TTTGCTGCACTCCTCTTGACGGGCTGGCCCTGCCTGCTCCTGCGGCAGCCTCTGGTGACGTGCTGTCCACCAGG
CCTTGGAGACAGGCTAGCCTGGCCACAGAATTAAACGTGTTGCCACACCTGCCGGCTTCTTAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3104/6881
FIGURE 2863

MAVADLALIPDVIDSDGVFKYVLIRVHSAPRSGRLQRARRSCAATSGLSTMRTSTTKCRATCRSKAATVSVWA
AGASPTRVTRRFTCTAIPWPMVLPSTPFQLRKSKPSTPTTRSPGLTTATEHSQPGACCLQQPLQSPAFACTPLA
GLALPAPAAASGDVLSTRPWRQASLATELNVLPHLPAS

WO 2004/030615

PCT/US2003/028547

3105/6881
FIGURE 2864

CCGGACGGACGCTCGTCTTCGCCCCGCCATGGCCGAGAGCGACTGGGACACGGTGACGGTGCTGCGCAAGAAGGGC
CCTACGGCCGCCCAGGCCAAATCCAAGCAGGCTATCTTAGCGGCACAGAGACGAGGAGAAGATGTGGAGACTTCC
AAGAAATGGGCTGCTGGCCAGAACAACAACATTCTATTACCAAGAACACGGCCAAGCTGGACCGGGAGACAGAG
GAGCTGCACCATGACAGGGTGACCCTGGAGGTGGGCAAGGTGATCCAGCAAGGTCGGCAGAGCAAGGGGCTTACG
CAGAAGGACCTGGCCACGAAAATCAATGAGAAGCCACAGGTGATCGCGGACTATGAGAGCGGACGGGCCATACCC
AATAACCAGGTGCTTGGCAAAATCGAGCGGGCCATTGGCCTCAAGCTCCGGGGAAAGGACATTGGAAAGCCCATC
GAGAAGGGGCCTAGGGCGAAATGAACACAAAGCCTCGAAATCAGTGCGCTCCAGCTGATCTCGTTCCGCCGGTTC
CCCTTGGCCGCCAGTTCGGTTCCTCACGGGCCGAACGGAACAAGGGGTCCAGCTTGCGGGGGACCCCTCCCCAG
CCATTCTGCTGTCAAACAAACAAAACCTTGCAAAGCG

WO 2004/030615

PCT/US2003/028547

3106/6881
FIGURE 2865

MAESDWDTVTVLRKKGPTAAQAKSKQAILAAQRRGEDVETSKKWAAGQNKQHSITKNTAKLDRETEELHHDRTVL
EVGKVIQQGRQSKGLTQKDLATKINEKPQVIADYESGRAIPNNQVLGKIERAIGLKLKGKD IGKPIEKGPRAK

WO 2004/030615

PCT/US2003/028547

3107/6881
FIGURE 2866

ACGGCAACGGGGCCTCTACTGCGCGCTGGAGGACCACAAGATCCTGGAGGACATGGAGCGCCGGGGAGTGGAGT
TTGTGCACGTGTACTGTGTGGACAACATCCTGGTGCGGCTGGCGGACCCGTGCTTCATCGGCTTCTGTGTGTTGC
AGGGCGCAGACTGTGGCGCCAAGGTGGTGGAAAAGGCATACCCCGAGGAGCCCGTGGGCGTGGTGTGCCAGGTGG
ACGGTGTCCCCAGGTGGTGGAGTACAGCGAGATCAGTCTGAGACCGCACAGCTACGTGCCTCCGACGGGAGCC
TGCTGTACAATGCAGGCAACATCTGCAACCCTTCTTACCCGAGGCTTCCTTAAGGCGGTACCAGGGAGTTTG
AGCCTTTGCTGAAGCCACACGTGGCTGTGAAGAAGGTCCCGTATGTGGATGAGGAGGGGAATCTGGTAAAGCCGC
TAAAACCGAACGGGATAAAGATGGAGAAGTTTGTGTTTGATGTGTTCCGGTTTGCTAAGAACTTTGCTGCCTTGG
AAGTGCTGCGGGAGGAGGAATTTTCCCCACTGAAGAACGCAGAGCCAGCCGACAGGGACAGTCCCCGCACCGCTC
GCCAGGCCCTGCTCACCAGCACTACCGGTGGGCTCTGCGGGCCGGGGCCCGCTTCCTGGATGCCCATGGGGCCT
GGCTCCAGAGCTGCCAGCTTGCCCCCAAATGGAGACCTCCGGCCATCTGTGAGATATCGCCCTTGGTGTCTT
ACTCTGGAGAGGGTTTAGAAGTGTACCTGCAAGGCCGGGAGTTCCAGTCCCCGCTCATCTGGATGAAGACCAGG
CCAGGGAGCCGAGCTGCAGGAGTCCGACCCGCCAGACTGTCCCCAGACTCCCCCGAGACCTGCCAGCCCCGG
CATCTGGAAGTCCCGACTCCCCCAGACCTGCCAGCCCCGGCGTCTTGAGCTGGGGGCTACAGCCCAGCCTGA
GCTCTGGGTGGGAAAGCAGCCTGCCCCATGCTTCCAGCCTGCAGAACACAGAATGAAACATGCTGGTAGACTCCA
CGAGGGCAGGGCCTCTCCTGTGCCTCTGGACACAAGTGGCGACAGCCTGCTGGGGGCTCTGTGGCTCCATTCT
GGCTGTGGGGTCTAGTCAAGAGGCAGAGGGACTTGGGACCTGGGAGAAATGGGGCTGAGAGGAGGCTTCGGGTGG
GGCCCAAGGGAGGTGTGGTGTCTCTGGGGAGAACAGGAGGGCATGTCCCTTTGGGAGCCCGCCTTGTGGATCCA
CCACACCCACCGAGCACTAGAAGCTGCATAAGCTACACAGGATGTGCTTCTGCAGCCTACAGATGCAGAACAG
AATGAGGGGGACAATTCCACCCACTCGAGGGCTGCCCCCTCTTCCTTAGCAGACGAACAGTAATGGGGGCAAGG
CTGGGGCATCCCAGCCACACACCCTGGATGCCAGCAAGGCCACAGAAAGAGCCTGATGTCCATGATCCAGGTG
GCTCTGAGAAGCTTGGCCTGGACACCTGAGCCTGCGGCCGGTACTCCTGCCTTCTCCCCATCTATCCCCAAGGCC
TCTGCCTCTCAGCCTCTTCCATGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
ATGCCGGCGGGCCTCTGTGATGGTTGCTGACTAATCCGGGATTTTCATGAGTCAGAGGCACCAACCCCTCACCCAGC
TGCCTGCTGCTTCTGACGGATCTTGGTGTCTCAGGCTGCCTGGCTCTCCGAGTGAGGACGCAGCCTCCATATTTGG
TGCACTCAGGCATGGCTGGGACAAGCCAGCTGCCCCAGGGTCTTCCCCCTGGTGATTCTCGCCTGCTTTCTCATC
TCAGGGGAGGCAGTGGCACCTCCCTCTCCCTGCTGACATGAAGAGAGCTATGATATGCCACTGCTGCCAACTCAT
CCTCTGCCCCACCTCGAAACCCACAGTCCCCAGTGGAGGGCCACTACTCATCCCCATTGGTTTCCCAGGGGAGG
GGTGTGTCTGGAAGGGCAGGTTTCAGATGCAGCCTTCCAGATTTAGAGGCACTGGGAGGACAGTGGCTGAGTGGGA
GGCGCCAGACCTGGGCAGGCAGCAGGCTCAGGCCACACCTTGTGATTTTTGAAACCAAAGCCAGAGATGAT
GTTTACTTCTCTCTCCCTGGCTCTGCCCTTCTTACTGCAAAACCATGCTGTGCCCTAGGGCCCTTCTCATAGCTGT
TCCTCATGGCCATGACTGGAACAGGGATGCAACCTCTTTCTACACAAGCACAGTTAGTTGGGTGAAGTCTTTTTT
TTTGTGTTGTTTTAGACGGAGTTTCACTCTTGTGCCCAGGCTGGAGTGAAGTGGCGTGACCTTGGCTCACTGCAA
CCTCCAGGCCAGCCTCAGCCTCCCTAGTAGCTGGGACTACAGGCACCCACTACCACGCTGGCTAATTCTTTGTA
TTTTTAGTAGAGATGGGGTTTGACCGTGTAGCCAGGATGGTCTCGATCTCCTGACCTCGTGATCCACCCACCTC
GGCCTCCCAAAGTGCTGGGATTATAGGTGTGAGCCACCGCGCCGGGCGGTTGCTGGCATCTTAATGTTCTGTAG
GTGGAATATTTCCAATAAACACAAGGTGCCGTAATTGACTGCT

WO 2004/030615

PCT/US2003/028547

3108/6881
FIGURE 2867

MERRGVEFVHVYCVDNILVRLADPVFIGFCVLQGADCGAKVVEKAYPEEPVGVVCQVDGVPQVVEYSEISPETAQ
LRASDGSLLYNAGNICNHFFTRGFLKAVTREFEPLLKPHVAVKKVPYVDEEGLVKPLKPNGIKMEKFVFDVFRF
AKNFAALEVLREEEFSPKNAEPADRDSPRTARQALLTQHYRWALRAGARFLDAHGAWLPPELPSLPPNGDPPAIC
EISPLVSYSGEGLEVYLQGREFQSPLILDEDQAREPQLQES

WO 2004/030615

PCT/US2003/028547

3109/6881
FIGURE 2868

TGCAGGAGAAATGGCTACTCATCACACGCTGTGGATGGGACTGGCCCTGCTGGGGGTGCTGGGCGACCTGCAGGCA
GCACCGGAGGCCCAGGTCTCCGTGCAGCCCAACTTCCAGCAGGACAAGTTCCTGGGGCGCTGGTTCAGCGCGGGC
CTCGCCTCCAACCTCGAGCTGGCTCCGGGAGAAGAAGGCGGCGTTGTCCATGTGCAAGTCTGTGGTGGCCCCCTGCC
ACGGATGGTGGCCTCAACCTGACCTCCACCTTCCTCAGGAAAAACCAGTGTGAGACCCGAACCATGCTGCTGCAG
CCCGCGGGGTCCCTCGGCTCCTACAGCTACCGGAGTCCCCACTGGGGCAGCACCTACTCCGTGTCA GTGGTGGAG
ACCGACTACGACCAGTACGCGCTGCTGTACAGCCAGGGCAGCAAGGGCCCTGGCGAGGACTTCCGCATGGCCACC
CTCTACAGCCGAACCCAGACCCCCAGGGCTGAGTTAAAGGAGAAATTACCGCCTTCTGCAAGGCCCAGGGCTTC
ACAGAGGATACCATTGTCTTCTGCCCCAAACCGATAAGTGCATGACGGAACAATAGGACTCCCCAGGGCTGAAG
CTGGGATCCCGGCCAGCCAGGTGACCCCCACGCTCTGGATGTCTCTGCTCTGTTTCCTTCCCCGAGCCCCCTGCCCC
GGCTCCCCGCCAAAGCACCCCTGCCCCACTCGGGCTTCATCCTGCACAATAAACTCCGGAAGCAAGTCAGTTAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3110/6881
FIGURE 2869

MATHHTLWMGLALLGVLGDLQAAPQVSVQPNFQQDKFLGRWFSAGLASNSSWLREKKAALSMCKSVVAPATDG
GLNLTSTFLRKNQCETRTMLLPAGSLGSYSYRSPHWGSTYSVSVVETDQYALLYSQGSKGPGEDFRMATLYS
RTQTPRAELKEKFTAFCKAQGFTEDTIVFLPQTDKCMTEQ

WO 2004/030615

PCT/US2003/028547

. 3111/6881
FIGURE 2870

GCGCAGGCGCAGTCTCCGCGTGCGCGCCTCGCCGGCGCCTCCATCCCGGATCCTTGCTGCAGCGTCAGCGCCGCC
GCCCCGTGCCTTTCCCTCTTCCCTCCTCCTCCTCCTTGGCATCCGCCTCTTCTTCCCTCCTGCGTCCTCCCCCGCTGCC
TCCGCTGCTCCCGACGCGGAGCCCCGGAGCCCGCGCCGAGCCCCCTGGCCTCGCGGTGCCATGCTGCCCCGGCGGCG
GCGCTGAAGGATGGCGACGCCGCTGCCTCCGCCCTCCCCGCGGCACCTGCGGCTGCTGCGGCTGCTGCTCTCCGG
CCTCGTCTCCTCGGCGCCGCCCTGCGTGGAGCCGCCGCCGCCACCCGGATGTAGCCGCCTGTCCCGGGAGCCTGGA
CTGTGCCCTGAAGAGGCGGGCAAGGTGTCTCTGCTGCACATGCCTGTGGGCCCTGCCTTCAGCCCTTCCAGGA
GGACCAGCAAGGGCTCTGTGTGCCCAGGATGCGCCGCCCTCCAGGCGGGGGCCGGCCCCAGCCAGACTGGAAGA
TGAGATTGACTTCCCTGGCCCAGGAGCTTGCCCGGAAGGAGTCTGGACACTCAACTCCGCCCCCTACCCAAGGACCG
ACAGCGGCTCCCGGAGCCTGCCACCCTGGGCTTCTCGGCACGGGGGCAGGGGCTGGAGCTGGGCTTCCCTCCAC
TCCAGGAACCCCCACGCCCACGCCCCACACCTCCATGGGCTCCCTGTGTCATCCGACCCGGTGCACATGTCGCC
CCTGGAGCCCCGGGGAGGGCAAGGCGACGGCCTCGCCCTTGTGCTGATCCTGGCGTTCTGTGTGGCCGGTGCAGC
CGCCCTCTCCGTAGCCTCCCTCTGCTGGTGCAGGCTGCATCGTGAGATCCGCCTGACTCAGAAGGCCGACTACGC
CACTGCGAAGGCCCTGGCTCACCTGCAGCTCCCGGATCTCGCCTGGGGACCAACGGCTGGCACAGAGCGCGGA
GATGTACCACTACCAGCACCAACGGCAACAGATGCTGTGCCTGGAGCGG

WO 2004/030615

PCT/US2003/028547

3112/6881
FIGURE 2871

CGGGGCTCGTGGCGTCGGGCCTGGCGGGCTCCCCGTTGGGCGGGGGCGGCGGTCCGAGCGGCTGCGGCAGCGGAA
GCGGGTCCGGGTCGCGCAGGGCGGGGGCGGCGCAGCGGGCGGAGGCGGCCGTGGGCCGCTGGGCAGAAATGTCAC
GATGGACGAGGGCGGCACGCCCTGCTCCCCGACAGCCTGGTCTACCAGATCTTCTGAGCCTGGGCCCCGGCCGA
CGTGCTGGCCGCCGGGCTGGTGTGCCGCAATGGCAGGCCGTGTCGCGGGACGAGTTCTGTGGAGGGAGCAGTT
CTACCGCTACTACCAGGTGGCCCGCGACGTGCCCCGACACCCAGCGGCCATGTCCTGGTACGAGGAGTTCCAGCG
GCTGTATGACACGGTGCCCTGCGTGGAGGTGCAGACGCTGCGGGAACACACAGACCAGGTCTGCACCTCAGCTT
CTCCCATTCGGGTACCAGTTGCGCTCTGCTCCAAGGACTGCACTGTGAAGATCTGGAGCAACGACCTGACCAT
CTCGCTGCTGCACAGCGCGGACATGCGGCCCTACAACCTGGAGCTACACCCAGTTCTCCAGTTCAACAAGGACGA
CTCGCTACTGCTGGCCTCGGGGGTGTTCCTGGGGCCGCACAACCTCCTCATCCGGCGAGATTGCTGTCATCAGCCT
AGACTCCTTCGCGCTGCTGTCCCGCTGCGGAACAAGCCCTATGACGTGTTTGGCTGTGGCTCACCAGAGACCAG
CCTCATCTCGGGGAACCTGCACCGCATCGGAGATATCACCTCCTGCTCGGTGCTGTGGCTCAACAATGCCTTCCA
GGATGTGGAGTCAGAGAACGTCAACGTGGTGAAGCGGCTGTTCAAGATCCAGAACCTCAATGCCAGCACCGTCCG
CACGGTGATGGTGGCCGACTGCAGCCGCTTCGACAGCCCTGACCTGCTGCTGGAAGCCGGTGACCCGGCCACGTC
CCCCGCGCATCTTTGACCTGGGCAGCGACAACAGAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXTCGGTACACCCCT
GCCGCCATGCTGCCCGCCTCGGTCTTAGGAGCTTGGGGAGGCCGGGCAGGGGTCTTGAGGGGACAGACAGCAAGC
AAGTCCACAGGCAAAGCTGGGATCGTTCACTCGCCCTGGGGTCACAAGCCCAGACCTGGGGCCTGTGGGATGAG
CAGTGAAAAACAAACGCAGGCAGGGCCGCTGGCCAGCAAGCAACCGACGGGCCTGATTAGGTCTGGGGCCCCCG
AGCAGGCAGTGCCACGGACCTCTGTGGTGCTCACAGCCCCAGAGACACCACTGAGGTAGGAAGCTGCCCTGGAG
TGATGTCCTTGGGGCATTGGACAGGGACCCTACCGTAGCCCTCCCTGCAGGCATCAAGCAGATCCTGCCACACC
AGATGACCACGGCAGGGCCCGTCTGTTGGTGCTCACAGCCCCAGAGACACCACTGAGGTAGGAAGCTGCCCTGGAG
TAGACATACACGGACACATCATCGGCATGGGCCTGTGCCCCGACAACAGGTGGGCCTCTTGCCAGTGTCCAGGC
GGGGTGCCCGCAGGCGGCCACACCTAGCACAGTGCCCTCGCCAGGTACCTGTACGTGAACAGCCGCGCCTGG
CCCAACGGTGCGGTGGTGGCCGACCCCATGCAGCCGCCACCAATCGCGGAGGAGATTGACCTGCTGGTGTTTCGAC
CTCAAGACCATGCGGGAGGTGAGGCGGGCTCTGCGTGCGCACCGCGCCTACACGCCCAACGACGAGTGCTTCTTC
ATCTTCCTGGACGTGACAGGGACTTCGTGGCCAGCGGGGGCGGAGGACCGGCACGGCTACATCTGGGACCGCCAC
TACAACATCTGTCTGGCCAGGCTGCGGCACGAGGATGTGGTCAACTCAGTGGTCTTCAGTCCCCAGGAGCAGGAG
CTGCTGCTCACGGCCAGCGACGACGCCACCATCAAAGCCTGGCGCTCCCCACGCACCATGCGCGTCTCCAGGCA
CCTCGCCACGGCCTCGCACCTTCTTCTCTGCTTGGCAGCCAGAGGCGCTGAGGTGTGCTGGGTGCACTGGAG
CCACCGGGACCCCTTGAGGACATCGCCAGGCTCTGTGGCTTTTCCCGAGCGGGAGAGGTGGAGATGCTTATAGC
AGTTACGCCTTAGGAAGGGGACAACCAGGCCCGCCACACGCTCACACACAAACCTGCTCACGCAGCTGTGATGC
TTGGCACGGGGTGGCCAGTGCAGATGGAGCCCAAGGCCCCCTCGGCCTCCTGGGCAACTGGGGTACACAGGATA
CTGGGGGTGCCGCTCCTCACTCAACCCAGGCTAGGGGTACACCTGACCCAGCTGGCCTCGGCCCCGGGGCACCTT
CGGCTGGTCTGTGGGGCCCTGGACGGTGGCCAGTGGTGGCAGGGGCTGCTCCTGGCTGTGGTTGTGCGCCCCG
GGCTTGGGAGCGGCCGGTACGCTGCTGTGGGCCGAGTGTGTTGCATGTCCACGCACCAACCCGTTACAGGGCCCT
GAATAAACAGTTGGCAACAGC

WO 2004/030615

PCT/US2003/028547

3113/6881
FIGURE 2872

MDEGGTPLLPSLVYQIFLSLGPADVLAAGLVCRQWQAVSRDEFLWREQFYRYYQVARDVPRHPAAMSWYEEFQR
LYDTVPCVEVQTLREHTDQVLHLSFSHSGYQFASCSKDCTVKIWSNDLTISLLHSADMRPYNWSYTQFSQFNKDD
SLLLASGVFLGPHNSSSGEIAVISLDSFALLSRVRNKPVDVFGCWLTETSLISGNLHRIGDITSCSVLWLNNAFQ
DVESENVNVVKRLFKIQLNASTVRTVMVADCSRFDSPDLLLEAGDPATSPCRIFDLGSDNRXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXGTPLPPCCPPRS

WO 2004/030615

PCT/US2003/028547

3114/6881
FIGURE 2873

GATTATTGATTAATTTGGGCACCGCGAGGGCTCGAGTCCCCCACACCACTGCCCGGCCTGCGGGGGAGCACAGA
CAGCCCGGGCCCTCCCGGCTGCAGGTCCCGGGCTTTCCCGCGCGGTTGCCGGCTCCGCCCAGAGGAGCCGCGCC
CGGCGGAGGGGTAAGAAAGGCAGGGTCGCGGCGTCAACGCGGCGGCCGTCTCGAGTCCAGGGCCC~~CG~~GTCTCTCC
CGACCTCCCGACGCCACCTCACGGCCTCAGGGGGACTGGGCTCCCGGATCTGACCGGCTTCAAGCTCAAGCCCTA
CGTGAGCTACCTCGCCCCCTGAGAGCGAGGAGACGCCCCTGACGGCCGCGCAGCTCTTCAGCGAAGCCGTGGCGCC
TGCCATCGAAAAGGACTTCAAGGACGGTACCTTCGACCTGACAACCTGGAAAAGTACGGCTTCGAGCCCACACA
GGAGGGAAAGCTCTTCCAGCTCTACCC~~C~~AGGAACTTCCTGCGCTAGCTGGGCGGGGAGGGGCGGCCTGCCCTCA
TCTCATTCTATTAAACGCCTTTGCCAGCTA

WO 2004/030615

PCT/US2003/028547

3115/6881
FIGURE 2874

CTGAGCTGTCCCTGCAGGACTCCAGTGGAAAGTGAAGAAGTGGGCACCGGGGAAAAGCTAGGATGTCCACACTC
CTACACCATGCAGGGAAGCTCGGGCACAGGCCGGGCTGGGCCGGGATCAGATGGGAAGCAGAAGCTCATCATGACC
AGAAACTGTTTCCCTACGGAGAGCACTTGGAGATGGCAATGCTGAACCTCACACTGTAGGACTCACACACGACTC
TAACGGGATTGTAAGAATCAAGTCACTCTCATGGGAAGAATTTTTATATGGGAAAGCGGCTAAAACCTTTCATTGG
ACTGGAAATGTTTGGAGATTGTTAAATTCCAAATCAGGAACCAAACTGCCCTCTAATAAGATATCAGCTGTCTA
AGCGTGTGGGTGCCGCTTTCTGCCAGTAGTTCTGGTTCTTAAGAAAAGCACCATAAATCAGACATGAAAATTCT
GGCTCCAAAAATAGCATTTTTCTTTGTGCAATAAAAAACGTGTGTATCAAGTATGACGTTCCCCAACGTGGACAC
ACTTGGTTCCCTCAGAAAGCCAAGCCCCGTGCAGCTGCCACATCCCAGGGCTTATGGTGCAGCAGGTGCTTTTTTC
AAGACAGGAATCAAAGTGTTAGGAACACGGCAGACAGGTGACACCTGGATACCAATGCAGGATGAGGAGTACTG
CAGAGGTCACAGGGAAGTCACAGAACAGTAATACGCTAGCAGGGGCATGGGGCGTGAAGAACAGAAGAAGACAGT
TTGAGAAAAAGCATCTGCAAAATGCTAAAGAGCAGAGCTTACCTCATTGCCTGTCCCCATCCCATCCCAGGTCACC
ACCTGGCTGACCCCAGGTCCCCGACCCAACAACAACCCCTCCCAAGTCCCTAACTCCCTCACTTGGACTTGAGAC
CCTTCACAACCCAGCAGCGCTCCGCTCCAACGTGACATCATGCTTTCTGGAAACTTCCCCGTATGTCCCACCTT
CCCACACTTGGTGCCCTGGAGCACCTTCCGGCCTCTACATGCTGTACGTTCCCCTGTGATCACCCTCCTCTCGGC
CTCTGGCCAACACAGTCCCACCCATCTGTGGGTAAACAAGGGGGTGTGTGTGTTCTTTTCAGCCTTGCTAAACTGT
CTGAATCAAGGATCACAAACTACAGCCTGCAGGCCAAAGCCAGCCCACAGCCTGTGTTTGTAATAAAGCTTTAT
TGGAACAAAGCCACACCCCTTAATCTACAGATGATCTGTGGCTACTTTCACACCACAACAGAGTACCATGGTTCT
GACAGAGACTGGGGGACCCTGTCTAAATGACTTCTGACCTGGACCTTTACTGAAAATCCTCCCAATCATTCTGTT
GACAAGATGGTGTATTACTTTTTGCAATAAGAAACAAGTAACCTTTGCAGAATTCCACCCATCTTTCAAGGCTG
ATCCCAGAAGTTCCCTCTGCCCACGCACCTACCTGATCCTGATCACTTCTTAACTGCAGCCCGGGCCACCCGGC
TCCAGCATCATTTGTGGAGTCTCAGCTCCATAAATCCAGAGGGCAGGTGGGGGTGTGTCTTAACCTTTCCCAGACC
TACTGTACCGAAACAGGACAGCAGAGTAGGAAGCCTCTGTGACTTCTGCTCCCTCCCTAGCTTTTCCACCAGACC
CTGCATGGTCCCACCCCTGGCTGTGTGAAGCAAGGATCAGGGAGCGTGGCTCTATGTCACTCTCCAGAACCCTGTC
CACCTGGCGTGGTGGCAGACATGGCTACCTGCAGCTGAGCTGCCAGTTCTCTGAGTCTCAAAGACCAGGCCA
TTTTCTTCATGTTTACCAGCTCATGTAACTGCAGAGAGAACCAAGGGAGCCTGAGAGCTGCCTGGGGAAGACA
CCAGACGCTGGGGTGCCAGCTGGGCTCCACCCACCCACGCTCAAGCCAGGCTGGGGGTGGAACAGGGTGT
GTGGTTTCTGGAGCTGGTTCTTAGATTTGGCATCTGAAGGGTATAAAGGCCTGGGGGGTGCACATCAAATGA
CCAAATCGATTTGAGGAGAGAGCCTTAAGGAAGGTTGTACCTTCTGTGCTGGATGCTCTTCAAGGACTGAAGAA
TTATTTTTGCATGTTTTCTTAATCCATGGCCATGGAACAAGTAAGGCAACCCCTGGGGACTGGTTCAGCAC
ATAAAAGATGACTTTTCTAGGACACC

WO 2004/030615

PCT/US2003/028547

3116/6881
FIGURE 2875

GGCTACCAGGGCATGGTGGACGGAGGCTCAAACATCGCAGAGGCCGACTGGGAGAGTGTCTCCAGCATCCTGCAA
GTGGGCGGGACGATCATTGGCAGTGC CGGTGCCAGGCCTTCCGCACGCGGGAAGGCCGCTGAAGGCTGCTTGC
AACCTGCTGCAGCGAGGCATCACCAACCTGTGTGTGATCGCGGGGACGGGAGCCTCACCGGGGCCAACCTCTTC
CGGAAGGAGTGGAGTGGGCTGCTGGAGGAGCTGGCCAGGAACGGCCAGATCGATAAGGAGGCCGTGCAGAAGTAC
GCCTACCTCAACGTGGTGGGCATGGTGGGCTCCATCGACAATGATTTCTGCGGCACCGACATGACCATCGGCACG
GACTCCGCCCTGCACAGGATCATCGAGGTGCTCGACGCCATCATGACCACGGCCCAGAGCCACCAGAGGACCTTC
GTTCTGGAGGTGATGGGACGACA¹CTGTGGGTACCTGGCCCTGGTGAGTGCCTTGGCCTGCGGTGCGGACTGGGTG
TTCCTTCCAGAATCTCCACCAGAGGAAGGCTGGGAGGAGCAGATGTGTGTCAAACCTCTCGGAGAACCGTGCCCGG
AAAAAAGGCTGAATATTATTATTGTGGCTGAAGGAGCAATTGATACCCAAAATAAACCCATCACCTCTGAGAAA
ATCAAAGAGCTTGTCTGCACGCAGCTGGGCTATGACACACGTGTGACCATCCTCGGGCACGTGCAGAGAGGAGGG
ACCCCTTCGGCATTTCGACAGGATCTTGGCCAGCCGATGGGAGTGGAGGCAGTCATCGCCTTGCTAGAGGCCACC
CCGGACACCCAGCTTGCCTGCTGCTACTGAACGGGAACACGCCGTGCGCCTGCCGCTGATGGAGTGCCTGCAG
ATGACTCAGGATGTGCAGAAGGCGATGGACGAGAGGAGATTTCAAGATGCGGTTGACTCCGAGGGAGGAGCTTT
GCGGGCAACCTGAACACCTACAAGCGACTTGCCATCAAGCTGCCGGATGATCAGATCCCAAAGACCAATTGCAAC
GTAGCTGTCTCAACGTGGGGGCACCCGCGGCTGGGATGAACGCAGCCGTACGCTCAGCTGTGCGCGTGGGCATT
GCCGACGGCCACAGGATGCTCGCCATCTATGATGGCTTTGACGGCTTCGCCAAGGGCCAGATCAAAGAAATCGGC
TGGACAGATGTGCGGGGCTGGACCGGCCAAGGAGGCTCCATTCTTGGGACAAAACGCGTTCTCCCGGGGAAGTAC
TTGGAAGAGATCGCCACACAGATGCGCACGCACAGCATCAACGCGCTGCTGATCATCGGTGGATTTCGAGGCCTAC
CTGGGACTCCTGGAGCTGTGAGCCGCCCGGGAGAAGCACGAGGAGTTCTGTGTCCCATGGTCATGGTTCCCGCT
ACTGTGTCCAACAATGTGCCGGGTTCCGATTTAGCATCGGGGCAGACACCGCCCTGAACACTATCACCGACACC
TGCGACCGCATCAAGCAGTCCGCCAGCGGAACCAAGCGGCGCGTGTTCATCATCGAGACCATGGGCGGCTACTGT
GGCTACCTGGCCAACATGGGGGGGCTCGCGGCCGAGCTGATGCCGCATACATTTTCGAAGAGCCCTTCGACATC
AGGGATCTGCAGTCCAACGTGGAGCACCTGACGGAGAAAATGAAGACCACCATCCAGAGAGGCCCTTGTGCTCAGA
AATGAGAGCTGCAGTGA²AACTACACCACCGACTTCATTTACCAGCTGTATTGAGAAGAGGGCAAAGGCGTGT
GACTGCAGGAAGAACGTGCTGGGTACATGCAGCAGGTGGGGCACCTCTCCATTTGATAGAACTTTGGAACC
AAAATCTCTGCCAGAGCTATGGAGTGGATCACTGCA³AACTCAAGGAGGCCCGGGGCAGAGGAAAAAATTTACC
ACCGATGATTCCATTTGTGTGCTGGGAATAAGCA⁴AAAGAAACGTTATTTTCAACCTGTGGCAGAGCTGAAGAAG
CAAACGGATTTTGTAGCACAGGATTC⁵CAAAGAACAGTGGTGGCTCAAGCTACGGCCCTCATGAAATCCTGGCC
AAGTACAAGGCCAGCTATGACGTGTGCGACTCAGGCCAGCTGGAACATGTGCAGCCCTGGAGTGTCTGACCCAGT
CCCGCTGCATGTGCCTGCAGCCACCGTGGACTGTCTGTTTTGTAACTTAAGTTATTTTATCAGCACTTTAT
GCACGTATTATTGACATTAATACCTAATCGGCGAGTGCCCATCTGCCCCACCTGCTCCAGTGCGTGCTGTCTGTG
GAGTGTGTCTCATGCTTTCAGATGTGCATATGAGCAGAATTAA

WO 2004/030615

PCT/US2003/028547

3117/6881
FIGURE 2876

GGGTGGGGCGTGTTGACCCCCTTAAAGGCGCCAGAGCCCGCGGTACGGCTCAGGTTCCCGGTGCTTCGCGCGTC
TGCCGTTGTACAGGCCAGGGAGGTGGCACCACCAGGCGAAGCTTGGCGAGATTGTGTCTCAAGCGCGTACGGG
CGCCAATTGGCCGGGCGATGTGGCGTGGACTGGCGCTGGCGCGAGCGATTGGCTGCGCGGGCCCGGGGCGGGGCC
AGTGGGCGGTGCGCGCCGCGAGACTGTGCTCAAAGCGGGCGCCATCCGGGACCGGCGGTTGTCTGTGGCCGAGGC
TGATCAGTGTTCTAGAACAGATCAGACATTTTGTAAATGATGCCTGAAATAAACACTAACCACCTCGACAAGCAAC
AGGTTCAACTCCTGGCAGAGATGTGTATCCTTATTGATGAAAATGACAATAAAATTGGAGCTGAGACCAAGAAGA
ATTGTACCTGAACGAGAACATTGAGAAAGGATTATTGCATCGAGCTTTTAGTGTCTTCTTATTCAACACCGAAA
ATAAGCTTCTGCTACAGCAAAGATCAGATGCTAAGATTACCTTTCCAGGTTGTTTTACGAATACGTGTTGTAGTC
ATCCATTAAGCAATCCAGCCGAGCTTGAGGAAAGTGACGCCCTTGGAGTGAGGCGAGCAGCACAGAGACGGCTGA
AAGCTGAGCTAGGAATTCCCTTGGAAGAGGTTCTCCAGAAGAAATTAATTATTTAACACGAATTCACTACAAAG
CTCAGTCTGATGGTATCTGGGTGAACATGAAATTGATTACATTTTGTGGTGAGGAAGAATGTAACCTTTGAATC
CAGATCCCAATGAGATTAAAAGCTATTGTTATGTGTCAAAGGAAGAACTAAAAGAACTTCTGAAAAAGCAGCCA
GTGGTGAAATTAAGATAACGCCATGGTTTAAATTTATTCAGCGACTTTTCTCTTTAAATGGTGGGATAACTTAA
ATCATTTGAATCAGTTTGTGACCATGAGAAAATATACAGAATGTGAATATGTAGGTAAATGATTACAGAAAAAT
TTATCTGCTTAACAACTTAGAATGACTTTTCTCTTTAAATTTAGTTCTATCATTAAATTTATCATTAAATTTAG
TTCTATCATTTGGTACTATCATTAAATGTATTATATACACTGATACTTTAAACTTGTGTGGAAAAACTAACTTA
TAATTTTGTATCACACACCCTGGATATGTGTTCTGTTTCTAAGCGACATTTGTGAGAGATTATTGTAAAATGAGA
GCGAGCAAATAAAACTTAATTTAATCTTTGCAGATACATACTTATGGGAAATTTGAACAAATGAGTGAAACTCTG
TTTTTAGTAGGCTGTGATAAACATTTCCGGAGCACTTGCGAGGACTTGCTATTTGCCAGGTGCTTTATGTATCA
TTAAATTTTTCTCATAGTTTCAGAAAAATGTGCAAAGGAACTATTGTCTCGCTCCTTCAAAACAGTCTTAATTAA
CTTTCATATTAGCAGATTAAACTAGCAGAGCAGGTTCAAGGGAATTAATGATATGGACCCTAATTTGTATCAT
TCTGAGTTGATTGTGTGGTTTATTCTATTCTGGAAACATGTTGATACTTACAGTCAGCCACTGCTTTTGATAAGTG
ATATTGATTAGGTTGAATCTTCTGTAAATAGTATTTACCAGTTAGCAAAGTCTGTGTTTTCAGAATTACAGTGA
GCACAGAGGTGTTTATAAAATGGGAATTGAGTCCCACTCGGTAAGAGTTGCTTAAACTTGACACTGTTGACATTT
GGGCTGGATAAAACCCCTGTGGTGGGGTCTGTGCTGTGCATTGCAGGATGGTGAGCAGCGTCCCTCTCATGTGAC
ACCCACAGTTATGCCGGATGTTGCCAGATGCCCTAGGGGACAGAGTCAACCCCAACTGAGGACCACTGTCCTA
CAGAGTCAGGAAATATTGTAGGGAGAAAAAATAACAACAACAAAGGCCCTGTGTTAATGTTAAATAGATGAGATT
ATGGAATGTGTATATTAATGTTAAAAATTGTACCTTGATCAATGTACTTTTATAAACTTGCCATAGATATCTCA
GATTTGAAACCTCAAGACAGATTTATTATTCTTAAATGCTGTATGATAATGAAGAAAAATAAAATTTATTTCTT
GCAAAGTTAAATGTTTGTAAATTCATAGAAATGACTCATTTATGGTTAACTTTGGGCAATTTATAATTTAGAC
AAGACTGTTTAGCAAGTATTTTATTGAAAAGTAAAAAAATTTGCAATTTAA

WO 2004/030615

PCT/US2003/028547

3118/6881
FIGURE 2877

MMPEINTNHLDKQQVQLLAEMCILIDENDNKIGAETKKNCHLNENIEKGLLHRAFSVFLFNTENKLLLQQRSDAK
ITFPGCFTNTCCSHPLSNPAELEESDALGVRRAAQRRKAE LGIPLEEV PPEEINYLTRIHYKAQSDGIWGEHEI
DYILLVRKNVTLNPD PNEIKSYCYVSKEELKELLKKAASGEIKITPWFKIIAATFLFKWWDNLNHLNQFVDHEKI
YRM

WO 2004/030615

PCT/US2003/028547

3119/6881
FIGURE 2878

GGGGCTTGGTTGAACGGACTCACCAGGAAACGTGACTTTCGTGTCCGACCTCTGCTGTATCAGGATTCGATTCTT
GGTGTTAAACAAGACAACGCTGAAGGCTCGGTGCAGCAGCCCTGCAAAGCTTTGTGTCTTAGGTTTCAGCGTGTCT
GACGTTCTCTGGGCCCTGAAGTCACTGCTGCTGGCTGGTGTGCTGGCCACTTGGTCGTGCTGGCCTGTCTCCCAC
CGGGTGGATGCCCAGCGAGCTCTGGATGCTGTGTTTTTCCAGCGCTCTTGGGAGGTGGGCTGTGCCACTGCCTGG
CCCACCTGGCCCCACCTGGCCCCACCATTACCTGAAGGGAAGCATGAACAGCCTTTGACGTGGGAGTGGCGACTGCT
GAGAGGGAAGTGTCTGTACACAAGCAATGTAGCCTTATGGGACCTGAGTGGAGCCCCAACCCACGCAGGGCGTGT
CTTCATGGCTTTTTCCTGGCCAATCTGATACCAAGATGCAGTGGCCAGAAGTACCTGCACTTCCACTCCTGTCAAG
TCTCTGCATGGCTATGGTGAGGAAGAGCTCTGCACTGGGCAAGGAAGTTGGCCGTCGAGTGAAGGAAATGGTGAT
GCTGGTGGCCCCCTTTCCGGCAGTCAAGTTCCTATCAAGGACATTCAGTTCTCGGAAAGTGGTGAAGGCACATGC
TTCCCTGCAATGGTGGCCGCTCTCTCCACTCTCTAGAAATATTAGAGGCTAGGCTGCTGCTGTATGTCAGGGCTA
GTCCCTCTTCTATGAATCCAGAATAACTCTGAAGAAGCCGAGTAACAGGCATGAAGTGAAGAGAAATCGCTGTAA
CAGGAAGACAGCAAAGCAGATGCTAATGACCACACTATTTAACGAACTGGAACCAACGAGAAAATACGGTATTAC
TGAAGACTGCACTTCCTTGAACAGAGTGCTCTTCTCAGCAAATCGGAAATGCCTACACAAATCGCTTTACAAGAA
AGACTGTTTCAAAGCAGCACCTTTCTCAATGTTCTCGTTCAGGTGACAATTCTTCTTGGTCTCAGCTCCAATTTT
ATTGTCATTTTCATCAATAAGGATACACATCTCTGCCAGGAGTTGAACCTGTTGCTTGTGCGAGGTGGTTAGTGTT
TATTTCAAGGCATCATTACAAAATGTCTGATCTGTTCTAGAACACTAATATTAAAGGAAAAGAGAAAG

WO 2004/030615

PCT/US2003/028547

3120/6881
FIGURE 2879

CCCGCGTGCATACGGCTGCCGGC**ATGG**CACATTACAACCTTCAAGAAAATTACGGTGGTGCCGTCCGCCAAGGACT
TCATAGACCTCACGTTGTGCGAAGACTCAACGAAAGACTCCAACCGTTATTCTATAAACATTACCAAATACATCGCA
TTAGACATTTTTACATGAGAAAAGTCAAATTTACTCAACAGAATTACCATGATAGACTTTCACAAATTCTAACAG
ATTTCCCCAAATTGGATGATATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACA
AGTTGGCTCTGGGGCAAATAAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGATGA
AGTATGGCGACTCTCTCTACCGCTGCAAACAGCTGAAGCGTGCGGCCCTGGGACGGATGTGCACAGTGATCAAGA
GGCAGAAGCAGAGTTTGGAGTATTTGGAGCAAGTGCCTCAGCATTTATCCCGTTTGCCAACCATTTGATCCGAATA
CCAGGACCTTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAAGGTGACGAGAGCAGACG
TGGATGTCCAGCCCTATGCGTTCACAACCAAGTCTCTGTTTGTGGGCACATGGATTATAAGTATCTACGTTGGC
AGGTTGTAGACACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGAACACCATCGAGATGCAGGCCATCACTG
CCCTGGCCCCACCTCCGTGCTGCGGTCTGTATGTGATGGATTTGTCTGAGCAGTGTTGGGCATGGGCTGAGGGAGC
AGCTAGAACTCTTCCAGAACATCAGACCTCTCTTCATCAACAAGCCTCTCATAGTTGTAGCCAACAAATGTGATG
TGAAGAGAATAGCTGAACCTTTCTGAAGATGATCAGAAAATATTTACAGATTTGCAGTCTGAAGGATTCCTGTAA
TAGAGACCAGCACCTTGACTGAGGAAGGTGTTATTAAAGTTAAAAAGAGGCTTGCGATAGGCTTTTGGCTCATC
GAGTGGAAAACCAAATGAAGGGAAATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGA
GGGACGATAAGGAGAGGCCCCCTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAACTGAGGAGT
CCAGGAAGAAGAGGGAACGAGATCTTGAGCTGGAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGG
ATTTAATGAATTTGTCTGAAAAACATGATAAGATACCAGAAATCTGGGAAGGCCATAATATAGCTGATTATATTG
ATCCAGCCATCATGAAGAAATTGGAAGAATTAGAAAAAGAAGAAGAGCTGAGAACAGCTGCTGGAGAGTATGACA
GTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAAAAGAAGT
TGAAAAATCTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGAAGGTTTCAGAGGA
CAGTTTTGGAGAAGGAGATGCGTAGTCTTGGTGTGACATGGACGATAAAGACGATGCCCATACGCAGTCCAGG
CAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGGAAGACTCTGCTCCCCCGTCTCTGTGGCCCGGAGTG
GGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCAAGATGGTGAAGAAAGCCAAGACTATGA
TGAAGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGGGGAGGCGGATAGACACGTGTTTGATATGAAGC
CCAAGCACTTGCTGTCTGGGAAGAGGAAAGCTGGTAAAAAGGACAGGAGAT**AGT**ATCCGTTTGTTGGCGTGGCT
TCGCTAGAGTGTTGCTGTTTATTTCTGGTTTGGCACAGTATGGTTTCATGAAATTGGAGCTCTGTATAAACTGA
AAAAGACAAAATAAGTAAAGCACTTGTGCTTTGCTGAAAACTATGGTTAACCTATATAGGTGTGGGAAATTTT
TGTCAGTGCATAATATTACAAATATTTTGTAGTACAGTGTTCACATTTAATGGAGTATCAGTTGCTTCAGAT
TTTCAGAACTGGGAAGATTTACTGGTTTAACTAGGTTGTTTTGATGGAGAAAAACCTTATTTTCTTTTGTAAGA
GCTGGGAGCAAACACGTTTATGAGTGTGTCGGAATCCCGTGCTTAAATACGCTCTTAAATTATTTTCTAGTCTT
ATTTTACAATGTCTCATTGTAGTCTGTCTTCAACTATTTTATCCAAAATAAACCTCCAGAAGAAAGT

WO 2004/030615

PCT/US2003/028547

3121/6881
FIGURE 2880

MAHYNFKKITVVPSAKDFIDLTLSTQRTPTVIHKHYQIHRIRHFYMRKVFTQQNYHDRLSQILTDFFPKLDDI
HPFYADIMNILYDKDHYKLALGQINIAKNLVDNVAKDYVRLMKYGDSLYRCKQLKRAALGRMCTVIKRQKQSLEY
LEQVRQHLSRLPTIDPNTRTLLCGYPNVGKSSFINKVTRADVVDVQPYAFTTKSLFVGHMDYKYLRWQVVDTPGI
LDHPLEDRNTIEMQAITALAHRAAVLYVMDLSEQCGHGLREQLFQNI RPLFINKPLIVVANKCDVKRIAELS
EDDQKIFTDLQSEGFPVIETSTLTEEGVIKVKTEACDRLLAHRVETKMKGKVNVEVLNRLHLAIPTRDDKERPP
FIEGVVARRKRMETESRKKRERDLELEMDDYILDQKYWDLNMLSEKHDKIPEIWEGHNIADYIDPAIMKKL
EELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREKKLKI LESKEKNTQGPRMPRTAKKVQRTVLEKEMR
SLGVDMDDKDDAHYAVQARRSR SITRKRKREDSAPPSSVARSGSCSRTPRDVSGLRDVKMVKKAKTMMKNAQKKM
NRLGKKGEADRHVFDMPKHL LSGKRKAGKKDRR

WO 2004/030615

PCT/US2003/028547

3122/6881
FIGURE 2881

TGCTAACCAGGCCAGTGACAGAAATGGATTGAAATACCAAGTGTGTGAAGCTGAATGATGGTCACTTCATGCCTG
TCCTGGGATTTGGCACCTATGCGCTGCAGAGGTTCCATAAAGTAAAGCTCTAGAGGCCGTCAAATTGGCAATAG
AAGCCGGGTTCCACCATATTGATTCTGCACATGTTTACAATAATGAGGAGCAGGTTGGACTGGCCATCCGAAGCA
AGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTCTACACTTCAAAGCTTTGGAGCAATTCCTCATCGACCAG
AGTTGGTCCGACCAGCCTTGGAAGGTCACTGAAAAATCTTCAATTGGACTATGTTGACCTCTATCTTATTCATT
TTCCAGTGTCTGTAAAGCCAGGTGAGGAAGTGATCCCAAAAGATGAAAATGGAAAAATACTATTTGACACAGTGG
ATCTCTGTGCCACATGGGAGGCCATGGAGAAGTGTAAGATGCAGGATTGGCCAAGTCCATCGGGGTGTCCAAC
TCAACCACAGGCTGCTGGAGATGATCCTCAACAAGCCAGGGCTCAAGTACAAGCCTGTCTGCAACCAGGTGGAAT
GTCATCCTTACTTCAACCAGAGAAAACCTGCTGGATTTCTGCAAGTCAAAGACATTGTTCTGGTTGCCTATAGTG
CTCTGGGATCCCATCGAGAAGAACCATGGGTGGACCCGAACCTCCCGGTGCTCTTGGAGGACCCAGTCCTTTGTG
CCTTGGCAAAAAAGCACAAGCGAACCCAGCCCTGATTGCCCTGCGCTACCAGCTGCAGCGTGGGGTTGTGGTCC
TGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAACGTGCAGGTGTTTGAATTCCAGTTGACTTCAGAGGAGA
TGAAAGCCATAGATGGCCTAAACAGAAATGTGCGATATTTGACCCTTGATATTTTTGTGGCCCCCTAATTATC
CATTTTCTGATGAATATTAACATGGAGGGCATTGCATGAGGTCTGCCAGAAGGCCCTGCGTGTGGATGGTGACAC
AGAGGATGGCTCTATGCTGGTGAAGTGGACACATCGCCTCTGGTTAAATCTCTCCTGCTTGGTGATTTTCAAGCAAGC
TACAGCAAAGCCCATTTGGCCAGAAAGGAAAGACAATAATTTGTTTTTTCATTTTGAAAAATTAAATGCTCTCT
CCTAAAGATTCTTCACCT

WO 2004/030615

PCT/US2003/028547

3123/6881
FIGURE 2882

MDSKYQCVKLNDGHFMPVLGFGTYAPAEVPKSKALEAVKLAIEAGFHHIDSAHVYNNEEQVGLAIRSKIADGSVK
REDIFYTSKLWSNSHRPELVRPALERSLKNLQLDYVDLYLIHFPVSVKPGEEVIPKDENGKILFDTVDLCATWEA
MEKCKDAGLAKSIGVSNFNHRLLEMILNKPGLKYKPVCNQVECHPYFNQRKLLDFCKSKDIVLVAYSALGSHREE
PWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRIRQNVQVFEFQLTSEEMKAIDGLN
RNVRYLTLDIFAGPPNYPFSDEY

WO 2004/030615

PCT/US2003/028547

3124/6881
FIGURE 2883

CTCTGAGGAGAAGCAGCAGCAAACATTTGCTAGTCAGACAAGTGACAGGGAATGCGATTCCAAACAGCAGTGTGTA
AAGCTAAATGATGGCCACTTCATGCCTGTATTGGGATTITGGCACCTATGCACCTCCAGAGGTTCCGAGAAGTAAA
GCTTTGGAGGTCACAAAATTAGCAATAGAAGCTGGGTTCGCCATATAGATTCTGCTCATTATACATAATGAG
GAGCAGGTTGGACTGGCCATCCGAAGCAAGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTCTACACTTCA
AAGCTTTGGTCCACTTTTCATCGACCAGAGTTGGTCCGACCAGCCTTGGAAAACTCACTGAAAAAAGCTCAATTG
GACTATGTTGACCTCTATCTTATTCATTCTCCAATGTCTCTAAAGCCAGGTGAGGAACTTTCACCAACAGATGAA
AATGGAAAAGTAATATTTGACATAGTGGATCTCTGTACCACCTGGGAGGCCATGGAGAAGTGTAAAGGATGCAGGA
TTGGCCAAGTCCATTGGGGTGTCAAACCTCAACCGCAGGCAGCTGGAGATGATCCTCAACAAGCCAGGACTCAAG
TACAAGCCTGTCTGCAACCAGGTAGAATGTCATCCGTATTTCAACCGGAGTAAATTGCTAGATTTCTGCAAGTCG
AAAGATATTGTTCTGGTTGCCTATAGTGCTCTGGGATCTCAACGAGACAAACGATGGGTGGACCCGAACCTCCCG
GTGCTCTTGGAGGACCCAGTCCTTTGTGCCTTGGCAAAAAAGCACAAGCGAACCCAGCCCTGATTGCCCTGCGC
TACCAGCTGCAGCGTGGGGTTGTGGTCTGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAACGTGCAGGTT
TTTGAGTTCCAGTTGACTGCAGAGGACATGAAAGCCATAGATGGCCTAGACAGAAATCTCCACTATTTTAACAGT
GATAGTTTTGCTAGCCACCCTAATTATCCATATTCAGATGAATATTAACATGGAGAGCTTTGCCTGATGTCTACC
AGAAGCCCTGTGTGTGGATGGTGACGCAGAGGACGTCTCTATGCCGGTGACTGGACATATCACCTCTACTTAAAT
CCGTCTGTTTAGCGACTTCAGTCAACTACAGCTGAGTCCATAGGCCAGAAAGACAATAAATTTTTATCATTTTG
AAAT

WO 2004/030615

PCT/US2003/028547

3125/6881
FIGURE 2884

MDSKQQCVKLNDGHFMPVLGFGTYAPPEVPRSKALEVTKLAIEAGFRHIDSAHLYNNEEQVGLAIRSKIADGSVK
REDIFYTSKLWSTFHRPELVRPALENSLKKALDYVDLYLIHSPMSLKPGEELSPTDENGKVIFDIVDLCTTWEA
MEKCKDAGLAKSIGVSNFNRRQLEMILNKPGLKYKPVCNQVECHPYFNRSKLLDFCKSKDIVLVAYSALGSQRDK
RWVDPNSPVLLEDVPLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRIRQNVQVFEFQLTAEDMKAIDGLD
RNLHYFNSDSFASHPNYPYSDEY

WO 2004/030615

PCT/US2003/028547

3126/6881
FIGURE 2885

ATGGATCCCAAATATCAGTGTGTGGAGCTAAATGATGGTCATTTCATGCCTGTATTAGGATTGGCACCTGTGTA
CCTCCAGAGGTGATTGACTGCAGTGGAAATGGTTTCTCCGTTTCTTCTATAATTGAAGAAATTGTTGTTCTTCC
AAGAATAGAGTTGTGGAGGTTACAAAATTAGCAATAGAAGCTGGTTTCTTCCATATTGATTCTGCTCATTATAC
AATAATGAGGAGCAGGTGGAATGTCATCCTTACCTCAACCAGAGCAAACGCTGGATTCTGCAAGTCAAAGAC
ATTGTTCTGGTTGCCCACACCCGTATTGCTCTGTGCTACCAGCTGCAGCGTGGGGCTGTGGTCCTGGTCAAGAGC
TCCAATGAACAGCAGATCAGAGAGAACATGCAGGTTTTGACTTTGAGTTGACTCCAGAGGACATGAAAGCCATT
GACAGCCTCAACGGAAATCTCCGACATGCTAAGTTACAATTTTAA

WO 2004/030615

PCT/US2003/028547

3127/6881
FIGURE 2886

MDPKYQCVELNDGHFMPVLGFGTCVPPEVIDCSGMVSPFLSIIEEIVCSSKNRVVEVTKLAIEAGFFHIDSAHLY
NNEEQVECHPYLNQSKLLDFCKSKDIVLVAHTLIALCYQLQRGAVVLVKSSNEQQIRENMQVDFELTPEDMKAI
DSLNGNLRHAKLQF

WO 2004/030615

PCT/US2003/028547

3128/6881
FIGURE 2887

CATTTTCACTGCGTTCAAGTATGCTTTTATGAGCTGGTGGTGCCATAGTTTTAGATTCCCTGTATCGAAAAGCTA
CAATTACATAAGGAAGAGATCTGTCTGGGTCGTTCAATAACGGTGTTGCCTGAAAGTTCGTAAAAGTAATACTTAA
TTATATTAAAAATTACAACATAACCAGATTTCCCATGATACCATGGTCTTGAATGAAGACAGTCGGAGTATTTGG
AAATGTATACACCTCTTTGGCTGGATCACCCAGAGTGGTAACAGCACTGCTGCCAACACGGAGTCCACACTGACA
TACCAATTTTACCTGCTTTTTCAGTATCAAACAGAAGAAACCCGTAAGTGTCTTGAAGTTCTTCCTGAGTATAACT
ACTTGCTTTTTTTTTGTTGGTAAAAAGTTTTGTATCTTTTCTGATAGGGACCCTGTCTCGATCTTCTCTAAGAGAG
AATGTAGCTGGGAGGGTGGTCTTAATTCATTTTACCAAGTATACCCTCAGAATTCTTTGACCATAGTCCTGTTCTC
TGTTAATGTCATAAATGCCGTCCTTGGCGTGGCCGCCGCCCCGAGGACCTGAGATCCCGGCTCGGCCTCCTTCC
CATGCTTCTCCCGGCCGTGCTCTGCGTCCTCCCGGGCCCTCGCGACACCGGCGCACGTGGGAAGCACCAGTCGCC
GGCTCCGCGCTCCCGCGGGGACCCCCCTCAGGGGCACGCCGTCCGCCCCAGCCCCGGGGTCTCGCCGCGGGCGC
TGACAGGGACGCCGCGGCCG

WO 2004/030615

PCT/US2003/028547

3129/6881
FIGURE 2888

MVLNEDSRSIWKCIHLFGWITQSGNSTAANTESTLTQFYLLFSIKQKPVSVLKFFLSITTCFFLLVKSFVSFL
IGTLRSSSLRENVAGRVVLIHFHQVYPQNS

WO 2004/030615

PCT/US2003/028547

3130/6881
FIGURE 2889

CAATGCTACATTAAACCCATTATGTAAGACCAATAAATGCAGAGCCAGTGTTTCAAGCACAGGAAATACCAGCAGG
CAGAATGCCAGTTTGCTTAAGAATGGTGAGCCTGAAGCTGAGTTACATAAAGAAACCACAGGTCCAGGCACCTGC
TGGCCCTCAGTCCAACACCACATCTTCTCTAAAAGGTGAACGCAAAGCCATCCACACGCTGCAAGATGTGTCAAC
ATGTGAAACAAAGGAGCTATTGAATGTCGGGGTTTTCTCCCTTTGTGCTGGTCCCTACCAAATACAGCAGACAC
CAAGGAAACCTCAGTAAAGAGCCTTTGGCCTCCTTTGTTTCAGAATCCTTTGATACTTCTGTTTGTGGAATAGC
CACAGAGCACGTAGAAATTGAGAACAGTGGGGAGGGGCTCAGGGCTGAGGCTGGTTCTGAAACCCTAGGCAGAGA
TGGAGAGGTGGTGTGAATTCCGACATGCACTATGAACTCTCTGGAGATTCTGATCTAGACCTGCTTGGTGATTG
TAGAAATCCCAGACTGGATTGGAGGATTCTTATACTTTAAGAGGTAGTTACACCAGGAAAAAAGATGTTCCAC
AGATGGCTATGAGTCGTCGTTGAACCTCCACAACAACAACCAAGAGGACTGGGGCTGCTCTAGCTGGGTTCCAGG
CATGGAGACGAGCCTCCCTCCCGGGCACTGGACTGCTGCGGTAAAGAAAGAAGAGAAGTGTGTGCCGCCCTTACGT
CCAAATCCGAGATCTCCACGGGATCCTCAGGACTTACGCCAATCTCTATAACAAAAGAACTCAAAGATACCAT
GAGAACTTCACACGGCCTGAGGAGGCACCCGAGTTTCAGTGCAAATGTGGCCTGCCAGCTCCTGGACAAGCAC
TTGGCAGGTGGCAGACGACCTCACCAGAACACTTTAGACCTGGAGTATCTGCGTTTTGCACATAAACTAAAAA
GACCATAAAGAATGGGGATTCTCAGCATTCTGCCTCCTCTGCCAATGTCTTTCCAAAGGAGTCACCAACCCAGAT
CTCCATTGGTGCTTTCCCTTCGACAAAAATCTCTGAGGCCCAATTTCTGCATCCTGCACCTAGGAGCAGAAGCCC
CCTTCTGGTAACAGTTGTGGAGTCAGATCCAGACCACAGGGGACGCCAGGAGAGGCTACACAGCCAGCAGTCT
GGACAGCTCTTCTCTTGGAGAGAGAGATGTAGTCATAATAGAGATCTTAGAAATTCTCAAAGAAATCACACTGT
TTCATTCCACCTCAACAACTGAAATACAACAGTACTGTGAAGGAATCTCGGAATGATATTTCACTTATTCTCAA
TGAGTATGCTGAATTCAACAAGGTGATGAAGAATAGCAACCAATTCATTTTCCAAGACAAAGAGCTAAATGATGT
TTCTGGAGAAGCCACTGCTCAAGAGATGTATCTGCCTTTCCAGGACGGTCAGCCTCCTATGAAGACATAATCAT
AGACGTGTGCACCAATTTGCACGTCAAATAAGAAGTGTGTGAAAGAGGCTTGTAAGAGTACCTTCCTGTTCTA
CCTTGTGCAAAACAGAAGACAAATCATTCTTTGTAAGAACAAGAACCTTCTGAGGAAAGGAGGCCATACAGAAAT
TGAACCTCAGCACTTCTGTCAAGCTTTCCACAGAGAGAATGATACACTAATCATCATCAGAAATGAAGATAT
ATCATCACATTTGCATCAGATTCTTCTTTGCTGAAGCTGAAGCATTTCGCCAGTGTCATCTTTGCTGGAGTAGA
CAGCCCTGGAGATGTTCTTGATCACACCTACCAAGAAGTGTTCGTGCAGGAGGCTTTGTGATATCAGATGACAA
GATACTAGAAGCTGTAACATTAGTTCAACTGAAGGAAATTATCAAAATCCTGGAAAACTAAATGGAAATGGAAG
ATGGAAGTGGTTGCTTCACTACAGGGAAAATAAAAAGCTAAAAGAAGATGAAAGAGTGGATTCAACTGCACATAA
GAAGAACATAATGTTGAAGTCATTTAGAGTGCAATATCATTGAATTGCTTCATTATCACCAGTGTGACTCTCG
ATCATCAACAAAAGCAGAAATTTCTGAAATGTTTGCTAAACCTGCAAATTCAGCATATTGATGCCAGGTTTGCTGT
CCTCCTAACAGACAAGCCTACTATCCCCAGAGAAGTCTTTGAAAATAGTGGAAATCCTTGTTACAGATGTAAATAA
CTTTATAGAAAACATAGAAAAAATAGCAGCTCCATTTAGGAGTAGCTATTGGTGACTCAACTACAGCCTGCCTGG
ATATGGATGATGCCAATAAAAAATTAGTATTTTCCCTTTGGAAAACCTGTGAACATGTGAATACACATGTGAACA
GTCTTACATTTGAAAAACCAATGTTCTACAACCTTGAAAGTTTTCAATTTTTATATTTTGTGAAATATGTCACA
GTGGCATTGCAGTTGTCTGTTAGCTTTGGGTGTCAGTGCTAGATATTGTTTTAAATTATTTTCAATTTTAAACAAG
ATGCCTTCTAAGCTATTGAGCTTATTAATAAATAATTTTACATGTTTACTTAGTTGGAGCAAAAAATAAGTCTATTT
TAACAAATAGCTTTGTTTTTGCATGCTAATGTCAGAAAGGCATACGATGCACATTATGCTCTGTTTTAAAGGTTT
TACCACCTTGTAAAAACTATAATCTTAAATGGTTTTATTTGCTGTTACACAAACAACACTACATAAAACATTTT
TTCTTAAATGGTACAAATTTATAAACTATCATTTTTCACCTACGGTATTTGTAAATACTACACTACAAAAATCAG
CTTTCTGAGAAAGAAATAATCATTTATTTATGATATTGAAAATTTCTACAGTAAACACTCAAAACCAAGCAAAAA
ACATTTGTAAGATACACGGTATCTATTTGGAGCAACGGTTTTTGTAACTAATGTGTTTCATTTTTTAAATAAAGA
CAACTAAAAATAA

WO 2004/030615

PCT/US2003/028547

3131/6881
FIGURE 2890

MASLLKNGEPEAELHKETTGPGTAGPQSNTTSSLKGERKAIHTLQDVSTCETKELNVGVSSLCAGPYQNTADTK
ENLSKEPLASFVSESFDTSVCGIATEHVEIENSGEGLRAEAGSETLGRDGEVGVNSDMHYELSGDSDDLGLGDCR
NPRLDLEDSTYTLRGSYTRKKDVPTDGYESSLNFHNNNQEDWGCSSWVPGMETSLPPGHWTAAVKKEKCVPPYVQ
IRDLHGILRTYANFSITKELKDTMRTSHGLRRHPSFSANCGLPSSWTSTWQVADDLTQNTLDLEYLRFHKLKQT
IKNGDSQHSASSANVFPKESPTQISIGAFPSTKISEAPFLHPAPRSRSPLLVTVVESDPRPQQQPRRGYTASSLD
SSSSWRERC SHNRDLRNSQRNHTVSFHLNKLKYNSTVKESRNDISLILNEYAEFNKVMKNSNQFIFQDKELNDVS
GEATAQEMYLPFPGRSASYEDIIIDVCTNLHVKLRSVVKEACKSTFLFYLVETEDKSFFVRITKNLLRKGGHTEIE
PQHFCQAFHRENDTLIIIRNEDISSHLHQIP SLLKLKHFPSVIFAGVDS PGDVL DHTYQELFRAGGFVISDDKI
LEAVTLVQLKEIIKILEKLNGNGRWKLLHYRENKKLKEDERVDSTAHKKNIMLKSFSQSANIELLHYHQDSRS
STKAEILKCLLNLIQHIDARFAVLLTDKPTIPREVFENSGILVTDVNNFIENIEKIAAPFRSSYW

WO 2004/030615

PCT/US2003/028547

3132/6881
FIGURE 2891

GGCGGTTCGGTCTCGCCTTGTGCGCCAGCTCCATTTTCTCTCTTTCTCTTCCCCTTTCTTTCGCGCCCAAGAGCGC
CTCCCAGCCTCGTAGGGTGGTCACGGAGCCCTGCGCCTTTTCTTGTCTCGGGTCTGCGTCCGCGCCTGCCCGG
CCATGAATGAGGAGTACGACGTGATCGTGCTGGGCACCGGCCTGACGGAATGTATCCTGTGAGGTATAATGTCAG
TGAATGGCAAGAAAGTTCTTCATATGGATCGAAACCCTTACTACGGAGGAGAAAGTGCATCTATAACACCATTGG
AAGATTTATACAAAAGATTTAAATACCAGGATCACCACCCGAGTCAATGGGGAGAGGAAGAGACTGGAATGTTG
ACTTGATTCCCAAGTTCCTTATGGCTAATGGTCAGCTGGTTAAGATGCTGCTTTATACAGAGGTAACCTCGCTATC
TGGATTTTAAAGTGACTGAAGGGAGCTTTGTCTATAAGGGTGGAAAAATCTACAAGGTTCTTCCACTGAAGCAG
AAGCCCTGGCATCTAGCCTAATGGGATTGTTTGAAAAACGTCGCTTCAGGAAATTCCTAGTGTATGTTGCCAACT
TCGATGAAAAAGATCCAAGAACCTTTGAAGGCATTGATCCTAAGAAGACCACAATGCGAGATGTGTATAAGAAAT
TTGATTTGGGTCAAGACGTTATAGATTTTACTGGTCATGCTCTTGCACCTTTACAGAAGTGTGATTACTTAGATC
AACCCTGTTATGAAACCATTAAATAGAATTAACTTTACAGTGAATCTTTGGCAAGATATGGCAAAAGCCCCATACC
TTTATCCACTCTATGGCCTTGGAGAACTGCCCAAGGATTTGCAAGGCTAAGTGCTATTTATGGAGGTACCTATA
TGCTGAATAAAACCCATTGAAGAAATCATTGTACAGAATGGAAAAGTAATTGGTGTAATCTGAAGGAGAAATTG
CTCGCTGTAAGCAGCTCATCTGTGACCCAGCTACGTAAAAGATCGGGTAGAAAAAGTGGGCCAGGTGATCAGAG
TTATTTGCATCCTCAGCCACCCATCAAGAACACCAATGATGCCAACTCCTGCCAGATCATTATCCACAGAACC
AAGTCAATCGAAAGTCAGATATCTACGTCTGCATGATCTCCTTTGCGCACAATGTAGCAGCACAAGGGAAGTACA
TTGCTATAGTTAGTACAACCTGTGGAAACCAAGGAGCCTGAGAAGGAAATCAGACCAGCTTTGGAGCTCTTGGAAC
CAATTGAACAGAAATTTGTTAGCATCAGTGACCTCCTGGTACCAAAGACTTGGGAACAGAAAGCCAGATCTTTA
TTCCCGCACATATGATGCCACCACTCATTTTGAGACAACGTGTGATGACATTAAAAACATCTATAAGAGGATGA
CAGGATCAGAGTTTGACTTTGAGGAAATGAAGCGCAAGAAGAATGACATCTATGGGGAAGACTAACAGCAGTACA
TGTTATTATGTAATTAGGACACATTTAAATTTGGCAAATAATGCATATAATGAAATCAATATTGTAAGGCCTGC
TTTTGTAATGAAATGGAGAGAATGAAGAGCGCTGTGCCAGTAAATACTCCCCTTCACCTTTCTAATTATTAAC
TGTTTTTCATGGAGTGGCTATTTCAGCATTGGCAGTTACCACATTCTGTTCAATTTAACCAAACCTGGCTTTTTTTTT
TTTCTAGTGAAGTTAAACAAACATTGGGATACCGACACAGACAACCTTGAGACAGTTTTTTTTAATCTTTAATCAG
TGTAGCTATGTGCTGCTGCTCAAGAGCTGGATCCATACAGGTTGTGTGTCATCTGTCTCTTGAGGTTTCAGG
AGATTCTAAATTGAATATTCCACGGTTTTGGGACAGCATCCGGAAGTTTTCCCTATGACTTTATATTTGTATTAT
GTCAAATGTTATGGCAGGGCCCAATAGCATAGCCACAAGTTTGGTTTATGTGGGCATAAATCTAACCAAACC
CCAGACATAGGGAGTCATTTGGAGAAAGCCTGTATGTGGTGTTTTAACTAATAAAGTTGATGAGAGAGAAGGGG
AGAGGAAGCGAACATAAAGCGGGTCAAGTGTAGTGCATCTTTGTATCTCAGGCGTGGCTTCTTCAGTGGACCAA
GCTGCAATGCAGTATTGACTTGACAGAGCCTCTACTTCTGTCTCAAATGGCTCCAAATGATTTCTGTACTGCAA
AATAAAGCCAAATTCTGGAACTA

WO 2004/030615

PCT/US2003/028547

3133/6881
FIGURE 2892

MNEEYDVIVLGTGLTECILSGIMSVNGKKVLHMDRNPYYGGESASITPLEDLKYRKFIPGSPPEMGRGRDWNVD
LIPKFLMANGQLVKMLLYTEVTRYLDFKVTEGSFVYKGGKIYKVPSTEAEALASSLMGLFEKRRFRKFLVYVANF
DEKDPRTFEGIDPKKTTMRDVYKKFDLGQDVIDFTGHALALYRTDDYLDQPCYETINRIKLYSESLARYGKSPYL
YPLYGLGELPQGFARLSAIYGGTYMLNKPIEEIIVQNGKVIGVKSEGEIARCKQLICDPSYVKDRVEKVGQVIRV
ICILSHPIKNTNDANSCQIIIPQNQVNRKSDIYVCMISFAHNVAAGKYIAIVSTTVETKEPEKEIRPALELLEP
IEQKFVSISDLLVPKDLGTESQIFISRTYDATTHFETTCDIKNIYKRMTGSEFDFEEMKRKKNDIYGED

1

WO 2004/030615

PCT/US2003/028547

3134/6881
FIGURE 2893

GGCACGAGGGACTCAGCGAAGGGTGGGCGCCGCCGAGGCCTCCTGCCGCTGGCGGGTTTCCGCGGAGTGCCGCCCG
GGCTCCGCTCTGCCCGCGCGGGCTCATGGGCAGAGTCGGCCGGGCGGGCCGGCATTAAACTGAAGAAAAGATG

TCCCTGTACGATGACCTAGGAGTGGAGACCAGTGACTCAAAAACAGAAGGCTGGTCCAAAACTTCAAACCTTCTG
CAGTCTCAGCTTCAGGTGAAGAAGGCAGCTCTCACTCAGGCAAAGAGCCAAAGGACGAAACAAAGTACAGTCCTC
GCCCCAGTCATTGACCTGAAGCGAGGTGGCTCCTCAGATGACCGGCAAATTGTGGACACTCCACCGCATGTAGCA
GCTGGGCTGAAGGATCCTGTTCCAGTGGGTTTTCTGCAGGGGAAGTTCTGATTCCCTTAGCTGACGAATATGAC
CCTATGTTTCCTAATGATTATGAGAAAGTAGTGAAGCGCCAAAGAGAGGAACGACAGAGACAGCGGGAGCTGGAA
AGACAAAAGGAAATAGAAGAAAGGGAAAAAAGGCGTAAAGACAGACATGAAGCAAGTGGGTTTGCAAGGAGACCA
GATCCAGATTCTGATGAAGATGAAGATTATGAGCGAGAGAGGAGGAAAAGAAGTATGGGCGGAGCTGCCATTGCC
CCACCCACTTCTCTGGTAGAGAAAGACAAAGAGTTACCCCGAGATTTTCTTATGAAGAGGACTCAAGACCTCGA
TCACAGTCTTCAAAGCAGCCATTCTCCCCCAGTGTACGAGGAACAAGACAGACCGAGATCTCCAACCGGACCT
AGCAACTCCTTCTCGCTAACATGGGGGGCACGGTGGCGCACAAGATCATGCAGAAGTACGGCTTCCGGGAGGGC
CAGGGTCTGGGGAAGCATGAGCAGGGCCTGAGCACTGCCTTGTGAGTGGAGAAGACCAGCAAGCGTGGCGGCAAG
ATCATCGTGGGCGACGCCACAGAGAAAGATGCATCCAAGAAGTCAGATTCAAATCCGCTGACTGAAATACTTAAG
TGTCCTACTAAAGTGGTCTTACTAAGGAACATGGTTGGTGCGGGAGAGGTGGATGAAGACTTGGAAGTTGAAACC
AAGGAAGAATGTGAAAAATATGGCAAAGTTGGAAAATGTGTGATATTTGAAATTCCTGGTGCCCTGATGATGAA
GCAGTACGGATATTTTGAATTTGAGAGAGTTGAATCAGCAATTAAAGCGGTTGTTGACTTGAATGGGAGGTAT
TTTGGTGGACGGGTGGTAAAAGCATGTTTCTACAATTTGGACAAATTCAGGGTCTTGGATTGTCAGAACAAAGTT
TGATTTTAAGAACTAGAGCACGAGTCATCTCCGGTGATCCTTAAATGAACTGCAGGCTGAGAAAAGAAGGAAAAA
GGTCACAGCCTCCATGGCTGTTGCATACCAAGACTCTTGAAGGACTTCTAAGATATATGTTGATTGATCCCTTT
TTTATTTTGTGGTTTTTTAATATAGTATAAAAAATCCTTTTAAAAAAACAAAAA

WO 2004/030615

PCT/US2003/028547

3135/6881
FIGURE 2894

MSLYDDLGVETSDSKTEGWSKNFKLLQSQLQVKKAAALQAKSQRTKQSTVLAPVIDLKRGGSDDRQIVDTPPHV
AAGLKDPVPSGFSAGEVLIPLADEYDPMFPNDYEKVVKRQREERQRQRELERQKEIEEREKRRKDRHEASGFARR
PDPDSDEDEDYERERRKRSMGGAAIAPPTSLVEKDKELPRDFPYEEDSRPRSQSSKAAIPPPVYEEQDRPRSPTG
PSNSFLANMGGTVAHKIMQKYGFREGQGLGKHEQGLSTALSVEKTSKRGGKIIVGDATEKDASKKSDSNPLTEIL
KCPTKVLLLRNMVGAGEVDEDLEVETKEECEKYGKVGKCVIFEIPGAPDDEAVRIFLEFERVESAIKAVVDLNGR
YFGGRVVKACFYNLDKFRVLDLAEQV

WO 2004/030615

PCT/US2003/028547

3136/6881
FIGURE 2895

CTGACCGACCTTCAGCAGGGCTGTGGCTACCAATGTTCTCTCGCGCGGGTGTGCTGGGCTGTCGGCCTGGACCTT
GCAGCCGCAATGGATTCAAGTTCGAAATATGGCAACTTTGAAAGATATCACCAGGAGACTAAAGTCCATCAAAAA
CATCCAGAAAATTACCAAGTCTATGAAAATGGTAGCGGCAGCAAAATATGCCCCGAGCTGAGAGAGAGCTGAAACC
AGCTCGAATATATGGATTGGGATCTTTAGCTCTGTATGAAAAAGCTGATATCAAGGGGCTGAAGACAAGAAGAA
ACACCTCCTTATTGGTGTGTCTCAGATCGAGGACTGTGTGGTGTCTATTTCCTCCATTGCTAAACAGATGAA
AAGCGAGGTTGCTACACTAACAGCAGCTGGGAAAGAAGTTATGCTTGTGGGAATTGGTGACAAAATCAGAGGCAT
ACTTTATAGGACTCATTCTGACCAGTTTCTGGTGGCATTCAAAGAAGTGGGAAGAAAGCCCCCACTTTTGGAGA
TGCGTCAGTCATTGCCCTTGAATTACTAAATTCTGGATATGAATTTGATGAAGGCTCCATCATCTTTAATAAATT
CAGGTCTGTCATCTCCTATAAGACAGAAGAAAAGCCCATCTTTCCCTTAATACCGTTGCAAGTGCTGACAGCAT
GAGTATCTATGACGATATTGATGCTGACGTGCTGCAAATTACCAAGAATACAATCTGGCCAACATCATCTACTA
CTCTCTGAAGGAGTCCACCACTAGTGAGCAGAGTGCCAGGATGACAGCCATGGACAATGCCAGCAAGAATGCTTC
TGAGATGATTGACAAATTGACATTGACATTCAACCGTACCCGCCAAGCTGTCATCACAAAAGAGTTGATTGAAAT
TATCTCTGGTGTGTCAGCTCTGTAAAGAAGGAAAATTACGCCAGTTGATTTTGTTTTAGCTTACTGCTGCCTTT
GTCCGAAGAACTGTTCTCCATTATTTGAATTACTGAAGACAGCAAGATATTTGTAAATTATCTTAAATAAAC
AACTTAAATAAAATCATTGTTTTTCTT

WO 2004/030615

PCT/US2003/028547

3137/6881
FIGURE 2896

MF SRAGVAGLSAWTLQPQWIQVRNMATLKDITRRLKSIKNIQKITKSMKMVAAAKYARAERELKPARIYGLGSLA
LYEKADIKGPEDKKKHLIGVSSDRGLCGAIHSSIAKQMKSEVATLTAAGKEVMLVGIGDKIRGILYRTHSDQFL
VAFKEVGRKPPTFGDASVIALELLNSGYEFDEGSIIFNKFRSVISYKTEEKPIFSLNTVASADSMSIYDDIDADV
LQNYQEYNLANIIYYSLKESTTSEQSARMTAMDNASKNASEMIDKLTLTFNRTRQAVITKELIEIISGAAAL

WO 2004/030615

PCT/US2003/028547

3138/6881
FIGURE 2897

TCCCAGCCTTCCCATCCCCCACC GAAAGCAAATCATTCAACGACCCCGACCCTCCGACGGCAGGAGCCCCCG
ACCTCCCAGGCGGACCGCCCTCCCTCCCCGCGCGCGGGTTCGGGGCCCGGCGAGAGGGCGCGAGCACAGCCGAGG
CCATGGAGGTGACGGCGGACCAGCCGCGCTGGGTGAGCCACCACCACCCCGCCGTGCTCAACGGGCAGCACCCGG
ACACGCACCACCCGGGCTCAGCCACTCCTACATGGACGCGGCGCAGTACCCGCTGCCGGAGGAGGTGGATGTGC
TTTTTAACATCGACGGTCAAGGCAACCACGTCCCGCCCTACTACGGAACTCGGTGAGGGCCACGGTGCAGAGGT
ACCCTCCGACCCACCACGGGAGCCAGGTGTGCCGCCCGCCTCTGCTTCATGGATCCCTACCCTGGCTGGACGGCG
GCAAAGCCCTGGGCAGCCACCACACCGCCTCCCCCTGGAATCTCAGCCCTTCTCCAAGACGTCCATCCACCACG
GCTCCCCGGGGCCCCCTCTCCGTCTACCCCCCGGCCTCGTCTCTCCTTGTGCGGGGGGCCACGCCAGCCCGCACC
TCTTCACCTTCCCGCCACCCCGCCGAAGGACGTCTCCCGGACCCATCGCTGTCCACCCAGGCTCGGCCGGCT
CGGCCCCGGCAGGACGAGAAAGAGTGCCTCAAGTACCAGGTGCCCTGCCGACAGCATGAAGCTGGAGTGTGCCC
ACTCCCGTGGCAGCATGACCGCCCTGGGTGGAGCCTCCTCGTCGACCCACCACCCCATCACCACCTACCCGCCCT
ACGTGCCCCGAGTACAGCTCCGGACTCTTCCCCCCCAGCAGCCTGCTGGGCGGCTCCCCACCGGCTTCGGATGCA
AGTCCAGGCCCCAAGGCCCGGTCCAGCACAGGCAGGGAGTGTGTGAAGTGTGGGGCAACCTCGACCCCACTGTGGC
GGCGAGATGGCACGGGACACTACCTGTGCAACGCCTGCGGGCTCTATCACAAAATGAACGGACAGAACCGGCCCC
TCATTAAGCCCAAGCGAAGGCTGTCTGCAGCCAGGAGAGCAGGGACGTCTGTGCGAACTGTGAGACCACCAAA
CCACACTCTGGAGGAGGAATGCCAATGGGGACCCTGTCTGCAATGCCTGTGGGCTCTACTACAAGCTTCACAAAT
TTAACAGACCCCTGACTATGAAGAAGGAAGGCATCCAGACCAGAAACCGAAAAATGTCTAGCAAAATCCAAAAAGT
GCAAAAAAGTGCATGACTCACTGGAGGACTTCCCCAAGAACAGCTCGTTTAACCCGGCCGCCCTCTCCAGACACA
TGTCTCCCTGAGCCACATCTCGCCCTTCAGCCACTCCAGCCACATGCTGACCACGCCCACGCCGATGCACCCGC
CATCCAGCCTGTCTTTGGACCACACCACCCCTCCAGCATGGTCACCGCCATGGGTTAGAGCCCTGCTCGATGCT
CACAGGGCCCCCAGCGAGAGTCCCTGCAGTCCCTTTCGACTTGCATTTTGCAGGAGCAGTATCATGAAGCCTAA
ACGCGATGGATATATGTTTTTGAAGGCAGAAAGCAAATTATGTTTGCCACTTTGCAAAGGAGCTCACTGTGGTG
TCTGTGTTCCAACCACTGAATCTGGACCCCATCTGTGAATAAGCCATTCTGACTCATATCCCTATTTAACAGGG
TCTCTAGTGCTGTGAAAAAAAAAATGCTGAACATTGCATATACTTATATTGTAAGAAATACTGTACAATGACTT
TATTGCATCTGGGTAGCTGTAAGGCATGAAGGATGCCAAGAAGTTTAAGGAATATGGGAGAAATAGTGTGGAAT
TAAGAAGAACTAGGTCTGATATTCAAATGGACAACTGCCAGTTTTGTTTCCTTCACTGGCCACAGTTGTTTG
ATGCATTAAAGAAAAATAAAAAAAGAAAAAGAGAAAAAGAAAAAAGAAAAAGTTGTAGGCGAATCATTTG
TTCAAAGCTGTTGGCCTCTGCAAAGGAAATACCAGTTCTGGGCAATCAGTGTACCGTTACCCAGTTGCCGTTGA
GGGTTTCAGAGAGCCTTTTTCTAGGCCTACATGCTTTGTGAACAAGTCCCTGTAATTGTTGTTGTATGTATAAT
TCAAAGCACCAAAATAAGAAAAGATGTAGATTTATTTATCATATTATACAGACCGAACTGTTGTATAAATTTAT
TTACTGCTAGTCTTAAGAACTGCTTTCTTTCTGTTTGTGTTTCAATATTTTCCTTCTCTCAATTTTGGTTG
AATAAACTAGATTACATTCAGTTGGC

WO 2004/030615

PCT/US2003/028547

3139/6881
FIGURE 2898

TGGCACCGGCATCGGCTGACACTGCTGCCTCCAGCTAGTTATTTTCGTCCTCTTCCGTTCTTCACCCCTACACCTT
GGAGGTGAACTTCTCACCTGAGGGCTGTAAAGACTCGTTTGAAAATGGAGAGCCAAGAACCAACGGAATCTTCTC
AGAATGGCAAACAGTATATCATTTCAGAGGAGTTAATTTTCAGAAGGAAAATGGGTCAAGCTTGAAAAACAACGT
ACATGGATCCTACTGGTAAACTAGAACTTGGGAATCAGTGAAACGTACAACCAGGAAAGAGCAGACTGCGGATG
GTGTCGCGGTTCATCCCGTGCTGCAGAGAACTTCACTATGAGTGTATCGTTCTGGTGAAACAGTTCCGACCAC
CAATGGGGGGCTACTGCATAGAGTTCCCTGCAGGTCTCATAGATGATGGTGAAACCCCAAGCAGCTGCTCTCC
GGGAGCTTGAAGAAGAACTGGCTACAAAGGGGACATTGCCGAATGTTCTCCAGCGGTCTGTATGGACCCAGGCT
TGTCAAACTGTACTATACACATCGTGACAGTCACCATTAAACGGAGATGATGCCGAAACGCAAGGCCGAAGCCAA
AGCCAGXXXXXXXXXAGTTTGTGGAAGTCATTTCTTTACCCAAGAATGACCTGCTGCAGAGACTTGATGCTCTGG
TAGCTGAAGAACATCTCACAGTGGACGCCAGGGTCTATTCTACGCTCTAGCACTGAAACATGCAAATGCAAAGC
CATTTGAAGTGCCCTTCTTGAAATTTTAAGCCCAAATATGACACTGGCCATTTTTGTAAACGAGACCACCAGGCC
TTCTTCACTAAGACTTTGTATTCAACTTAGTTTAATGTAGATTTGCCATTAGCTTTTTCGTAAAAATAAAGCACA
GAACAGATGTGGTGGTGGTATGGAATTGTAATTACAGGTAGGTTGTGACCTTCCTTTAAATTTGTTATAACTCCA
GCTAAAATTAACAAAGAATATAAATGCAAGTATGTTTACTCCAATTTTTTTAAAGCTCAACAGCAGTTAACTACA
GCTCAGTTACTTTTCTAGTCCAGTCTGGTAGACAGGGGTATTTGTATAGAGAAATAGACCTGAGTTCTCAATTAG
GTCA

WO 2004/030615

PCT/US2003/028547

3140/6881
FIGURE 2899

TGCGTTTAGGGCGAAGACGGAGTTGTAACTTCTTAAAATTCCTCTCTCGACACTTCGGTAATTCCTCTTTTCGAG
ACTAAAGCTCTTTTTGTATGCGTGTGTGTCAAGCGTATGCCCCGGGATTCTCCTCCGCTTCCTTTTCTCGGTCTT
CCTTCTTGCTTTAGGGACCGGAAGAGTCCTTGAACCAAAATAGCTCGGCGGGCACTTCCGGGGCCGGCGCCCAGA
GTTCCGGGAGGGTGCAGGCAGGAGAGGGAAAGGCAGCAGCGGCGGCAGCTGGAGGATGAAGAAGGAGCATGTGCT
TCACTGCCAGTTCTCCGCGTGGTACCCGTTCTTCCGAGGCGTTACCATCAAGAGTGTCAATTCTTCCACTTCCTCA
GAATGTGAAGGATTATTTACTCGATGATGGAACCTCTGGTGGTTTTAGGAAGGGATGATCCACCAACACATTCTCA
GCCAGACAGTGATGATGAAGCAGAAGAAATACAGTGGTCTGATGATGAGAACACAGCCACGCTTACGGCACCAGA
ATTTCTGAGTTTGCCACTAAAGTCCAGGAACCTATCAATTCCCTCGGGGGCAGTGTCTTTCCTAAGCTTAATTG
GAGTGCCCCAAGGGATGCGTATTGGATAGCAATGAATAGTTCTCTGAAATGTAAAACCCCTCAGCGACATCTTTCT
GCTTTTCAAGAGTTCCGATTTTCATCACTCGTGACTTCACTCAGCCGTTTATTCATTGTACTGATGATTCTCCAGA
TCCATGTATAGAATATGAGCTCGTTCTCCGAAAATGGTGTGAATTGATTCTTGGGGCTGAGTTTCGATGTTTTGT
CAAGGAAAACAAGCTTATTGGTATTTCTCAAAGAGACTACACACAATACTATGATCATATTTCTAAACAAAAGGA
AGAAATTCGCAGATGCATACAAGACTTTTTCAAGAAACACATACAGTACAAATTCCTTAGATGAAGACTTTGTGTT
CGATATATACAGAGACAGTAGGGGGAAGGTGTGGCTCATTGACTTTAATCCATTTGGTGAAGTCACAGATTCCT
GCTGTTACCTGGGAAGAAGTATCTGAGAACAACCTTAAACGGCGATTTTAGTGAAGTTGACGCTCAAGAGCA
GGATTCCCCAGCTTTCCGTTGCACAAACAGTGAAGTGACAGTCCAGCCCAGCCCCCTATTTGAGTTACCGGCTACC
CAAGGACTTTGTAGACCTCTCTACTGGGAGGGACGCTCACAAGCTAATAGACTTCCTTAAGCTGAAGAGAAATCA
GCAGGAGGACGACTGATGAGCGTACTGTAACCTGGAGAAGAGGAGGCCCCGCCCCACCGCTCCGGGAGCTGCTCAT
CAGCCGCAACTTCCTGCCGACCCTGATGCGGGTGGGCCGAGCAGTGTGGACATCAGCCACTTTTTATATTCAATGT
ACATTCACCTGGGGAAAAAACGGAGGGACTTTGCTACTTGTAAAAATAACATAATAAATAGATCTTAAACATAG
GAAAACCATACTGTTCTGATAATAAAATGCTTTCTATGAAAT

WO 2004/030615

PCT/US2003/028547

3141/6881
FIGURE 2900

MKKEHVLHCQFSAWYFFFRGVTIKSVILPLPQNVKDYLLDDGTLVVSGRDDPPTH SQPDS DDEAEEIQWSDDENT
ATLTAFEPFEPFATKVQEPINSLGGSVFPKLNWSAPRDAYWIAMNSSLKCKTLSDIFLLFKSSDFITRDFTQPFIH
CTDDSPDPCIEYELVLRKWCELIPGAEFRFCVKENKLIGISQRDYTQYYDHISKQKEEIRRCIQDFFKKHIQYKF
LDEDFVFDIYRDSRGKVLIDFNPFGEVTD SLLFTWEELISENNLNGDFSEVDAQEQDSPAFRCTNSEVTVQPS
YLSYRLPKDFVDLSTGRDAHKLIDFLKLKRNQQEDD

WO 2004/030615

PCT/US2003/028547

3142/6881
FIGURE 2901

CCGGCTCCCGCAGGGCCGCGCCGAGGCAGGCGAGCCCCGCGGCGCCCAGGCGCGGGCCCCGGGCCCCCGCCGCCG
CCGCCGCCGCCGGGCGCGGCATTTTTATTTCAGGCGACGCTTAAGGGAGCCCCGCCGCGCCCGGTGCATTGTGGGA
GCGGCCCCGCGGCCCGTTTTTCGGGAGGAGGCGGAGGGCGCAAAGCGAGCCGGTGGATCCATAAAGAAGCCAGCCAA
CCCCGAGAGGGAGGGGAGGGGCTGAGCTGTGAGGAGAGCGGGGCCCAAGAACCATGTCTACGCGGGAGTCCTTTA
ACCCGGAAGTTACGAATTGGACAAAAGCTTCCGGCTAACCAGATTCACTGAACTGAAGGGCACAGGCTGCAAAG
TGCCCCAAGATGTCCTGCAAAAATTGCTGGAATCTTTACAGGAGAACCACTTCCAAGAAGATGAGCAGTTTCTGG
GAGCCGTTATGCCAAGGCTTGGCATTGGAATGGATACTTGTGTCAATTCCTTTGAGGCACGGTGGGCTTTCCTTGG
TTCAAACACAGATTACATTTACCCGATCGTAGACGACCCTTACATGATGGGCAGGATAGCGTGTGCCAATGTCC
TCAGTGACCTCTATGCAATGGGGGTACGGAATGTGACAATATGCTGATGCTCCTTGGAGTCAGTAATAAAATGA
CCGACAGGGAAAGGGATAAAGTGATGCCTCTGATTATCCAAGTTTTAAAGACGCAGCTGAGGAAGCAGGAACAT
CTGTAACAGGCGGCCAAACAGTACTAAACCCCTGGATTGTCTGGGAGGAGTGGCTACCACTGTCTGCCAACCCA
ATGAATTTATCATGCCAGACAATGCAGTGCCAGGGGACGTGCTGGTGCTGACAAAACCCCTGGGGACACAGGTGG
CAGTGGCTGTGCACCAAGTGGCTGGATATCCCTGAGAAATGGAATAAGATTAACTAGTGGTCACCCAAGAAGATG
TAGAGCTGGCCTACCAGGAGGCGATGATGAACATGGCGAGGCTCAACAGGACAGCTGCAGGACTCATGCACACGT
TCAATGCCCACGCCGCCACTGACATCACGGGCTTCGGGATTTTGGGCCATGCGCAGAACCTGGCCAAGCAGCAGA
GGAACGAGGTGTCGTTTGTAAATCACAACCTCCCGGTGCTGGCCAAGATGGCTGCGGTGAGCAAGGCCTGCGGAA
ACATGTTTCGGCCTCATGCACGGGACCTGCCCGGAGACTTCAGGCGGCCTTCTGATCTGTTTACCACGTGAGCAAG
CAGCTCGGTTCTGTGCAGAGATAAAGTCCCCCAAATATGGTGAAGGCCACCAAGCATGGATTATTGGGATTGTAG
AGAAGGGCAACCGCACAGCCAGAATCATAGACAAACCCGGATCATCGAGGTCGCACCACAAGTGGCCACTCAAA
ATGTGAATCCACACCCGGGGCCACCTCTTAATCTAGACAGAAATAGCTGTTTGGTTTGTTTTTAAATAGATCT
ATTTCCCTTATCACTTCAATTAAAGACTATAAACAACAAAAATCTCATTGTGTCTACACATCGGGGTGACCTTAG
GTCGGTTTTGTAAGTGGATACAATTAATAAAATAAAATCCATTGCCTTTTTTTCCTGTTACATTAAGTGAAGATGC
ACCTAATCTTGAGGCAGCTTCTGAGTTGAGAATT

WO 2004/030615

PCT/US2003/028547

3143/6881
FIGURE 2902

GAGAGCCCTCCTCAGGGGCTGTCTCTGCCTTCCCTTCTTCCCATGTGTATCTGGGGCAGCTGAGGCAGGGCTAGG
AGAAGAGCCAGGTTCTCCTGCCACCTCCAAGCGATGAAGCAGCCCTGGGCCAACTCCAGCATTCTCGTGTGAA
CTGCAGAGGAGCCCTGCGCTTCCAGCTACTTGCAGCCAGACAGCCACCTGAGGATATTGACCATAAGGACTCAT
ATCTCATTACAAGAAGCATCATGCGCCGAGCCAGACTACATAGAAGATGACAATCCTGAACTCATTAGGCCTCAGA
AACTGATCAATCCTGTAAAAACCTCCCGGAACCATCAAGATCTTCACAGAGAACTTCTTATGAATCAAAAAAGGG
GTCTTGCTCCTCAGAACAAACCAGAATTGCAGAAGGTGATGGAAAAAGAAAACGAGACCAAGTAATAAAGCAGA
AGGAAGAAGAAGCACAGAAGAAGAAATCTGACTTGGAATAGAGCTATTAAACCGGCAGCAGAAAGTTGGAGCAGC
TTGAACTTGAGAAGCAGAAATTGCAAGAAGAGCAAGAAAATGCCCCGAGTTTGTGAAGGTGAAAGGCAATCTCA
GGAGAACAGGCCAAGAAGTCGCCCAAGCCAGGAGTCCTAGGCTGAGGCTGCACCAAGACCTCGTGTGTACCCCC
ACAGAGCTGTCTGTGGGTGCCTTCTCAATCTCAGGGCAAAAGCCCCTGGAGAATAATTTAGCCAGCAGAGAAATTT
TGACTTGCACTAGGATTTGGTTTGATTTTCTACGATCTGGGTGGATGCCTTGCTGTGACAGTTGCAGTTCCCTA
TTCGCCAAATGAAGGGCAGTGCCCGCACGTAAGTTGGAATGATGGACCTGTGTTGAGAGACTTAACAGAACC
CAAGCAAAACAAGTGAGAACAGGAAAAAGGAAGAGGACACTGGAATCAATTCTTGAGAGTTGCACTACTTGGTTT
TTCTTCCATTCCAAGTTTCGTGGGACCCAGAGCCTTTTTCTTTTAAAGCTAAAAACAAGTGTTTTAATTCCTC
TTTTTGTATCTGTAGATAATTGAGATCACCTAGAAATGCGTTTAATCTGTTCACTCACTGTAAATTTTGAGGA
CCCAGAAATGTCTTGTAAATTTATACTTTACCCCTGTGTCAGTTAACACCAGAGAAGGAACGTGAATGTCGAG
CACAGCCACTACCCTTGTGGCACTTAATTTAGAAATAGGGTGAGAAGTTTAAAGCCCATCTTGATTTTATTTT
CATTCTTTTGGTTCTCTGTGTAATAATAGCAGGCTACATAGTGACATTCCAGTTCCAAGAAGGTACATCCTGTC
CATTCAATTAATGCTTTGATTACTAGGAGGGTTTCTGTTGAGTTTGTGTTTTAAATGTCTTGCTGATCTAGTTCT
TTCAGATGGAATAACCTTCCAGTCCCTTAGAGAGTGGAAGTCTAGTCCATATAACCCAGCTTCAGTAGCAAAAGTAG
AAGCCGCCACATCTTTTCATTCTCCAAGAGGAGAGTGGGGAAGGTTCCCATGACCAGCTGGGCAGTCAGGATTT
CTCTAGGCATTCTAATGTGAATAAGTGTAGACTGCTGTCAAGGAGGCTTCATCAGAAGATGTATAGCATTTGAA
TGTCTAATGATAATGCATATCATTAGAATCCAAGCTTTGAAAAATTTCTGATTAATGCTCATGTATTTCTTTATCT
TTGTTTTTCTTGTGAAGAAAGACTTTCACCACTGTCTGAGTGATGATGCTGTTGATAAGGATGATGTCGATGAC
TACTATATTGCATCTCTCAGGAACAGCTGATGGGAAGGGAGGGGCTGCTGAGTTCCCTTGTTCTAGCTAGCAGCA
CGCTCCTCAGAGAGGGGGCCGAGTTACAGACAGCAGCCGCATTCTCATGCAAAATAGTTTTAACTGCTAGTGT
GGGCATCGGTACCTTTTGCTGGGTGATACCGAAGAAATGTTGAGGATTTAGTATGCTCCGTAGAGACAGTTT
CCAGTCATTTCTGCATTGGAGAGACTTCTCATACTTTCTTTGAAGACTCATAGAAAGCTGGATCTAGAGCTTTT
AATCCTTAATTAGCACAGTAGAAATAGCTTTCTATGGGAATGCTTTAGTGTTAGCAGTTGACAATTAGGCCCAT
ATTCAATCTGAATGGGAACAAAAGTAAATGCAATGATAATATACTGCTAGTTAGAGAAACATGTTAGTTGATTAT
ACCTGAAATGGATTATTTATCTCATCAGCAAGTATTATTTGAATAAAATGAGAAATGCTTAAGAAAAATTTGTTGC
TCTACAGTAATTTGGTTTCGAAGAATGGAATGGTAACTATTTTTTCCCATCGTTCTTTTGAGAGAAGGAAGTGTG
ATGACTGATGATCTTGAAAGGCCATTTCTGATTGCACGTTGACTGGAATCTTTCTTTGTGTCTGTGGACTAGC
GATGCTGTTTGTAAATGAAGATTCGGGACTGGCTCATATCTTTTATCTAACTAGATGTCAGATCTTGAAATCT
GTATTCTCGAAGCAATTCTGCCACTTGATCGTATTACAGGGGGCCCTGGTAGGCTCCTTTAGAAGGACCATTTCT
GTTCTTAGAGCTTAAGTAGAATTCAATCTTCACTGAAAAAAAAAAGTTACTTAAGAAAGCATTTCTTTCTTAA
TCTCACTCAAATCTGCAGAATTATTTGTAATTAGTAATACAAAATCTGGCCAAAAGGAGACTTGTAATAAGCGTA
AAGTGGTGTCTTATGCTAAACGGTGGAAATGTATAGGCAGAGAAGCTCTTTGAAGTTGTCAGATGAGCTGGGCTCA
CAAGCCTGATTCAAACAGGCTGTCGGTCTCCTCTCACCCTTAATACTGTGCAGCCCAACTCCTAGGACTCTTG
AACATCTGAGCAGTTTTGTGCTTTGAGCCACTTTTGTACAAAAATGGCTCCATTTTCCACAGCGTGGTTTTCTT
AAAATAGTTTTAATGTTTTATAGTCTCATAGTAGTAGTGTGCTTTCTAAGCTATAACAGTCGACTTTATTCTTCT
ACTCTGAAAAATCTTGACTTGTTTGTAGTGTATATAATATATAAAGGGAGCCTTAATGGATTGGTTTTTCATAAT
TTAATATTTTTTGTATTTGCTCTTGTATAATTGTTTTTAAACGGAAAGTATTAAAGAAATGAGGGTGGAAATCTTA
GAACCAAAGTTATTCTTAATAAAAAATCACCACATGCTTGGACCATGCAAAAAAAAAAAAAAAAAAAAAAAAAA

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WO 2004/030615

PCT/US2003/028547

3144/6881
FIGURE 2903

MAEPDYIEDDNPELIRPQKLINPVKTSRNLHRELMLNQKRGAPQNKPELQKVMKRKRQDQVIKQKEEEAQK
KKSDLEIELLKRQQKLEQLELEKQKLQEEQENAPEFVKVKGNLRRTGQEVAAQES

WO 2004/030615

PCT/US2003/028547

3145/6881
FIGURE 2904

CGCGCCAGAGACGCAGCCGCGCTCCCACCACCCACACCCACCGCGCCCTCGTTTCGCCTCTTCTCCGGGAGCCAGT
CCGCGCCACCGCCGCGCCGCCCAGGCCATCGCCACCCTCCGCAGCCATGTCCACCAGGTCCGTGTCTCGTCTCCT
ACCGCAGGATGTTTCGGCGGCCCGGGCACCGCGAGCCGGCCGAGCTCCAGCCGGAGCTACGTGACTACGTCCACCC
GCACCTACAGCCTGGGCAGCGCGCTGCGCCCCAGCACCGCCGAGCCTCTACGCCTCGTCCCCGGGCGGCGTGT
ATGCCACGCGCTCCTCTGCCGTGCGCCTGCGGAGCAGCGTGCCCGGGGTGCGGCTCCTGCAGGACTCGGTGGACT
TCTCGCTGGCCGACGCCATCAACACCGAGTTCAAGAACACCCGCACCAACGAGAAGGTGGAGCTGCAGGAGCTGA
ATGACCGCTTCGCCAACTACATCGACAAGGTGCGCTTCTGGAGCAGCAGAATAAGATCCTGTGGCCGAGCTCG
AGCAGCTCAAGGGCCAAGGCAAGTCGCGCCTGGGGGACCTCTACGAGGAGGAGATGCGGGAGCTGCGCCGGCAGG
TGGACCAGCTAACCAACGACAAAGCCCGCTCGAGGTGGAGCGCGACAACCTGGCCGAGGACATCATGCGCCTCC
GGGAGAAATTGCAGGAGGAGATGCTTCAGAGAGAGGAAGCCGAAAACACCCCTGCAATCTTTCAGACAGGATGTTG
ACAATGCGTCTCTGGCACGTCTTGACCTTGAACGCAAAGTGGAATCTTTGCAAGAAGAGATTGCCCTTTTGAAGA
AACTCCACGAAGAGGAAATCCAGGAGCTGCAGGCTCAGATTAGGAACAGCATGTCCAAATCGATGTGGATGTTT
CCAAGCCTGACCTCACGGCTGCCCTGCGTGACGTACGTACGCAATATGAAAGTGTGGCTGCCAAGAACCTGCAGG
AGGCAGAAGAATGGTACAAATCCAAGTTTGCTGACCTCTCTGAGGCTGCCAACCAGGAACAATGACGCCCTGCGCC
AGGCAAAGCAGGAGTCCACTGAGTACCGGAGACAGGTGCAGTCCCTCACCTGTGAAGTGGATGCCCTTAAAGGAA
CCAATGAGTCCCTGGAACGCCAGATGCGTGAAATGGAAGAGAAGTTTGCCGTTGAAGCTGCTAACTACCAAGACA
CTATTGGCCGCTGCAGGATGAGATTGAGAATATGAAGGAGGAAATGGCTCGTCACCTTCGTGAATACCAAGACC
TGCTCAATGTTAAGATGGCCCTTGACATTGAGATTGCCACCTACAGGAAGCTGCTGGAAGGCGAGGAGAGCAGGA
TTTCTCTGCCTCTTCCAACTTTTCTCCTGAACCTGAGGGAACTAATCTGGATTCACTCCCTCTGGTTGATA
CCCACTCAAAAAGGACACTTCTGATTAAGACGGTTGAACTAGAGATGGACAGGTTATCAACGAACTTCTCAGC
ATCACGATGACCTTGAATAAAAATTGCACACACTCAGTGCAGCAATATATTACCAGCAAGAATAAAAAAGAAATC
CATATCTTAAAGAAACAGCTTTCAAGTGCCTTTCTGCAGTTTTTCAGGAGCGCAAGATAGATTTGGAATAGGAAT
AAGCTCTAGTTCTTAACAACCGACACTCCTACAAGATTTAGAAAAAGTTTACAACATAATCTAGTTTACAGAAA
AATCTTGCTAGATACTTTTTTAAAGGTATTTTGAATACCATTAAACTGCTTTTTTTTTTCCAGCAAGTATC
CAACCAACTTGGTTCTGCTTCAATAAATCTTTGGAAAA

WO 2004/030615

PCT/US2003/028547

3146/6881
FIGURE 2905

MSTRSVSSSSYRRMFGGPGTASRPSSRSYVTTSTRITYSLGSALRPSTSRSLYASSPGGVYATRSSAVRLRSSVP
GVRLLQDSVDFSLADAINTEFKNTRTNEKVELQELNDRFANYIDKVRFLEQQNKILLAELEQLKGQKSR LGDLY
EEEMRELRRQVDQLTNDKARVEVERDNLAEDIMRLREKLQEEMLQREEAENTLQSFQDVDNASLARLDLERKVE
SLQEEIAFLKKLHEEEIQELQAQIQEQHVQIDVDVSKPDLTAALRDVRQQYESVAAKNLQEAEEWYKSKFADLSE
AANRNNDALRQAKQESTEYRRQVQSLTCEVDALKGTNESLERQMREMEENFAVEAANYQDTIGRLQDEIQNMKEE
MARHLREYQDLLNVKMALDIEIATYRKLEGEESRISLPLPNFSSLNLRETNLDSLPLVDTHSKRTLIIKTVETR
DGQVINETSQHDDLE

WO 2004/030615

PCT/US2003/028547

3147/6881
FIGURE 2906

ATGGAGGGAGCAGAACAACCACACAAGGAGCCCATGCCTTGGCTACAGTCAAACCTTCAGCGTGTCTATAAGGCA
TGTCGTCGCATTTGTGCAAACATTCAGCGGCCTCTTATGTTACAGATGACTCCCCTGGTGGTGAGGAGATGGCA
TTTCCTCCCTGTGTGCAGGTAAAGACTCAAACACTGATTACAGAGCTGCTGTCCCATCTACTCACTGCTCCCATGT
TCGGCTGGCGCTGAGGAGACACCTTTAGCTGCTGTGACCCCATGGTCACAAAAGCCACAGAGCTCAGAGCTGCTC
CTCAAAGAACATCCTCCCTGTTTGCTTCTTTCTAGCCCCCTCTCCTTTCTGGTATCCACGGAACCTATCCTATGAT
GTGACAGAAGAGTCAATTAAGGAATTCTTTAGAGGATTAATTATCAGTGCAGTGCCTTTACCACGTGAACCCAGC
AATCCAGAGAGGAGAATTCGAGTGGACGTTGCTGATCAAGCACAGGATACAGACAGGGACGATCGTTCTTTTGGC
CGTGATAGAAATCGGGATTCTGACAAAACAGATACAGACTGGAGGGCTCGTTCTGCCACAGACAGCTTTGATGAC
TACCCGCCTAGAAGGGGTGATGATAGGTTTGGAGACAAGTATCGAGATCGTTATGATTACAGACCAGTCTGGCCGT
GGGTATTGGTATGAGTATCGGGATGGCCCATGCCGGGATATGGATCGATATGGCTGGCGGGATCGCTATGATGAC
CGAGGCAGCAGAGACTATGCTAGAGGCTATCATTCTGGATAGGCAGTGGCAGAAGGGCATTGGCAGTGGGTAC
CCAGGGACAATGACTACAGAGGAGGCAGGGACCGCTATGAAGACCGATACAACAGATGGGATGATGGGTCTGTGCA
GCTCCAGAGATGATTTCTCTCGGGATGATTATAGGTATAATGATAGACGTCCCCCGTCCCCCTCAAAGACCCAAA
CTGAATCTAAAGCCTCATAATACTCCTAAGGGAGATGATTCCTTCTGCTAGTACCTCCAGTCCGGTTCGAGCTTAT
TTTGCTTTTGAGGGGGCAAAGCCCGTTGATAGAGCTGCTAGAGAAACAAAAAGACACCCAAGCTGGCGAAGTGAA
GAAACCCAGGAACCGGAGAGGCACCCAAGCTGGCGAAGTGAAGAACTCAGGAACCTGGAACGGTGGAGGACAGGA
AGTGAGTCATCGCACACTGGGACCTCCGCCACACCCGGCAAAGTCAATCAGACCAGGATGCAGGAAGGAGAGAG
ACTGAAAAGTCTCTAGAAAATGAAACACTCAGTAAGGAGGAAGACTGTCACTCTCCAACCTCTAAATCTACCAAA
ACTGATCAGCCCCAAAAGAGCTCAGACACACAGCACGAATACCCTACAAGTGGTGGGGGAAAAGTAACTCCAGCT
CAACCGTCTGAGAAAGGACCAGCAAGGAAAGATGAAAATAAAGTAGGTGTGGTGAATGTCCCCAAAAGACCACACT
GGGAACCTCTAGCCATGGTCCAGGAGACAGAGGGAACAAAGACCCTGGAAGGAGTCAGATAGGAAAGATGGCAAA
AAGGAGCATGACTCCAGATCTGCACCTGAGCCAATATGTGAAATACGGAATTTGTGA

WO 2004/030615

PCT/US2003/028547

3148/6881
FIGURE 2907

MEGAEQPHKEPMPWLQSNFVSYSKACRRICANIQRPLMFTDDSPGGEEMAFPPCVQVKTQTLIQSCCPIYSLLPC
SAGAEETPLAAVTPWSQKPQSSELLLKEHPPCLLLSSPSPFWYPRNLSYDVTEESIKEFFRGLIISAVRLPREPS
NPERRIRVDVADQAQDTRDDRSFGRDRNRDSKTDTDWRARSATDSFDDYPPRRGDDRF GDKYRDYDSDQSGR
GYWYEYRDGPCRDMDRYGWRDRYDDRGSRDYARGYHSWIGSGRRAFGSGYPGTMTEEAGTAMKTDTTDGMGGA
APEMISLGMIIIGIMIDVPRPPQRPKLNLKPHNTPKGDDSSASTSQSGRAYFVFGGAKPVDRAARETKRHPSWRSE
ETQEPERHPSWRSEETQELERWRTGSESSHTGTSATPGKSQSDQAGRRETEKSLENETLSKEEDCHSPTSSTK
TDQPQKSSDTQHEYPTSGGGKVTPAQPSEKGPARKDENKVGVVNVPKDHTGNSSHGPGDRGNKDHWKESDRKD GK
KEHDSRSAPEPICEIRNL

WO 2004/030615

PCT/US2003/028547

3149/6881
FIGURE 2908

AGAACATCCAGTCATGGATAAAAATGAGCTGGTTTCAGAAGGCCAACTGGCCGAGCAGGCTGAGCGATATGATGA
CATGGCAGCCTGCATGAAGTCTGTAAGTCTGAGCAAGGAGCTGAATTATCCAATGAGGAAAGGAATCTCCTCTCAGT
TGCTTATAAAAATGTTGTAGGAGCCCATAGGTCATCTTGGAGGGTCGTCTCAAGTATTGAACAAAAAGACGGAGGG
AGCTGAGAAAAAACAGCAGATGGCTCGCGAATACAGAGAGAAAATTGAGACGGAGCTAAGAGATATCTGCAATGA
TGTACTGTCTCTTTTGGAAAAGTTCTTGATCCCCAGTGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAAT
GGAAGGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGGGATGACAAGAAAGGGATTGTGGATCAGTCACA
ACAAGCGTACCAAGAAGCTTTTGAATCAGCAAAAAGGAAATGCAACCAACACATCCTATCAGACTGGGTCTGGC
CCTTAACCTTCTCTGTGTTCTATTATGAGATTCTGAACTCCCCAGAGAAAGCCTGCTCTCTTGCAAAGACAGCTTT
TGATGAAGCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATACAAAGACAGCACGCTAATAATGCAATTACT
GAGGGACAACCTGACACTGTGGACATCAGATACCCAAGCAGACGAAGGTGAAGCAGGAGAAGGAGTGAAAAATTA
ACCGGCCCTTCCAGCTTTTGTCTGCCTCATTCTAAAATTTACACAGTAGACCATTGTCTATCCATGCTGTCCCA
AATAGTTTTTTGTTTATGACTTATGTGAGGTTTATGTTACTTCTATTTGAATTTCTCTATTTCCCATACGGTTTC
TATGTTTAAATATTAGGGGAGGAGAGGAAGTTAACATTTAGGGAGTTATCTGTTTTCATCTTGAGGTGTTCAATAT
GGGGACGTGGAATTTTTTATACAGGTTATAAATGTTTGGCATAGTACTTTTGGTATATTGTGGCTTCACAAGGGCC
AGTGTTAAACTGCTTCCATGTCTAAGCAAAGAAAAGTGCCTACATATTGGTTTGTCTGGTGGGGAATAAAAGG
GATCATTGGTTCCAGTCACAGGTGTAGTAATTGTGGTACTTTAAGGTATGGAGCACTTACAAGGCTGTGGTAGA
AACAGATGCCCCATGGATACCACATGTAAACCATGTATAATTGTGGAATACTCAATCTCATACTTTGACCACA
GCTGCAGAAGTGTTCTTTTAGACACAGTTGTGACCCATTTTACTCTGTATAAGGGCAGAAATGGTTCACATTCCA
TTATTTATAAAGTTACCTGCTGTAGCATTCAATTATTTTGTCTACACTCATTTTATTTGTATTTAAATGTTTTAG
GCAACCTAAGAACAAATGTAAAAGTAAAGATGCAGTAAAATGAATTGCTTGGTATTCACTACTTCATGTATATC
AAGCACAGCAATAAAACAAAAACCCATGTATTTAACTTTTTTTAGGTTTTTTGCTTTTGTGATTTTTTTGATAC
TTGCCTAACATGCATGTGCTGTAAAATAGTTAAACAGGGAAATAACTTGAGATGATGGCTAGCTTTGTTTAAATGT
CTTATGAAATTTTCATGAACAATCCAAGCATAATTGTTAAGAACACACGTATTAAATTCATGTAAGTGAATAAA
CGTTTTATGAATGGACTTTTCAACTACTTTCTCTACAGCTTTTCATGTAAATTAGTCTTTTGGTCTGAAACTTC
TCTAAAGGAAATTGTACATTTTTTTGAAATGTATTCCTTATTCTCTCTTGGCAGCTAATGGGCTTTTACCAAGTT
TAAACACAAAGTTTATCATAACAACAAAAATACTACTAATATACTACTGTTTCCATGTCCCATGATTCCCTCTC
TTCTTCCCCACCCTGAAAAAATCAGTTCTATTTTTTCTGGGAGAGGGGGAGATTGATTGAAAAAAATGTAAT
ATGTTCCATTTGAAATATTGGTAAATGGCATTCTTCTAAGGAGCCACAGTGTTCTTGGCCCATCATGACAT
TGGGTAGCATTAACTATAAGTTTTGTGCTTCCAAATAACTTTTTGGTTTTTAAACAATTTCTTGATACTCTTATAG
CCTGCCTTCAGTGTTGATCCTTTATTCTTTCTATCTGTGAGGTGCACAAGATTACCCCTCTTTTATAGCCTTCTG
TCTTTCTTGTACCAACCATTCTACTTGGTGGCCATGTACTTGGAAAAAGGCCGATGATCTTTCTGGCTCCAC
TCAGTGTCTAAGGCACCCTGCTTCTTTGCTTGCATCCACAGACTATTTCCCTCATCTATTTACTGCAGCAAAA
TCTCTCCTTAGTTGATGATACTGTGTTTATCTCCCTTTAAACCCCTACCTATCCTGAATGGTCTGTCAATTGTCTG
CCTTTAATCCTTCTCTTTCTCTTCTCTATTTCTCTAATAATGATGGGGCTAAGTTATACCCAAAGCTCACTTT
ACAAAATATTTTCGTGAGTACTTTGCAGAAAACACCAACAAAAATGCCATTTTAAAAGAGGTGTATTTTTTATTT
CAGAATGTAAGCTCCTCAAGAACAGGGACAATGTTTTCTGTATGTTCTATTGTGCCTAGTACACTGTAAATGCTC
AATAAATATTGATGATGGGAGGCAGTGAATCTTGATAAGGGTGAGAACTGAAATCCC

WO 2004/030615

PCT/US2003/028547

3150/6881
FIGURE 2909

GCTCGGAGCCTCGGCGGACCTTGCTGCCTCTGTCTCTTTAACGCGAGAGGAAGCGATGCAGAGGGGTGGAAAATG
GCAGAGCTGCAGATGTTACTAGAGGAGGAGATCCCGTCTGGCAAGAGGGCGCTGATCGAGAGTTACCAGAACCTG
ACTCGGGTGGCAGACTACTGTGAAAACAACCTACATACAGGCTACAGACAAGAGAAAAGCTTTAGAGGAGACCAA
GCCTATACAACCCAATCTCTAGCTAGTGTGCTTATCAAATAAATGCATTGGCCAACAATGTACTCCAGTTGCTG
GATATCCAAGCCTCTCAGCTTCGGAGAATGGAGTCTTCCATCAATCATATCTCACAGACTGTGGATATTCATAAG
GAGAAAGTGGCACGAAGAGAGATTGGTATTTTGACAACAAATAAGAATACATCAAGAACTCACAAAATAATAGCA
CCTGCGAATATGGAGCGCCCTGTAAGGTATATTCGGAAACCTATCGATTACACAGTTCTGGATGATGTGGGCCAT
GGTGTCAAGTGGCTAAAAGCCAAGCATGGAAATAACCAGCCTGCAAGAACTGGCACACTGTGAGAACAAATCCT
CCTACTCAGAAACCGCCAAGTCTCTCCCATGTGAGGCCGGGGAACACTGGGACGGAATACTCCTTATAAAACCTG
GAACCTGTTAAACCCCCAACAGTTCCTAATGACTATATGACCAGTCTCTGCTAGGCTTGGAAGTCAGCATAGTCCA
GGCAGGACAGCATCTTTAAATCAGAGACCAAGGACACACAGTGGGAAGTAGTGGAGGAAGTGGGAAGTCAGAAAAC
AGTGGTAGCAGTAGTATTGGCATTCCCATTTGCTGTGCCTACACCTTCGCCACCCACTATTGGACCAGAAAACATT
TCTGTCCCTCCTCCTTCTGGAGCTCCACCAGCACCACCTCTGGCACCCTTCTCCAGTGAGCACTGTGATAGCA
GCCCCGGGCTCAGCTCCTGGTTCCTCAGTATGGCACAATGACCAGGCAGATATCTCGACACAACCTCTACTACTTCT
TCGACATCTTCTGGTGGATACAGACGAACTCCCTCTGTGACTGCTCAATTTCTGCTCAGCCTCATGTTAATGGA
GGTCCACTTTATTCTCAAAATTCAATTTCTATTGCTCCACCCCTCCCCCTATGCCTCAGTTGACTCCACAGATA
CCTCTCACAGGCTTCGTGGCCAGGGTGCAGGAAAACATTGCTGATAGTCCAACCTCCACCGCCACCACCTCCACCA
GATGACATTCCCATGTTTGATGACTCTCCACCTCCCCACCACCACCAGTGGATTATGAAGATGAGGAGGCT
GCAGTAGTTTCAGTATAATGATCCATATGCAGATGGGGATCCTGCTTGGGCCCCAAGAATTATATTGAGAAAGTT
GTTGCAATATATGATTATACAAAAGACAAGGATGATGAGCTGTCAATTTATGGAGGGTGCAATCATTATGTTATA
AAGAAGAATGATGATGGCTGGTATGAAGGAGTCTGCAATCGAGTGACTGGTCTGTTCCCTGGGAACATATGTTGAA
TCAATCATGCACTATACTGATTAATTTTTTTTTTCTTTTGAAGTAGATTCTTATTACTCAGTCATACTGTGGGA
CTATTATGGTTAACAGAACTGTCTTAATATGTTTTAAATGTGCCATATTTTCAGAACATGCTGTTTTATTGGT
AAATTGAATGTCTACCTGTAAGCATAAATCTTTGAGGCAGTTTATGTATTGCTGAATAGCAATTTATACAAGAAG
CTGTCCATAACIGATTATGCTTATGTACTTACTTACACATTTTTAACTTTATGACCAGCCTAAATATTCTGGGGG
AAGTGGGGTATAATATTTAACGAATCATGATTCAGATTGTACCATTACATGTTTCAGTGCAGCATGGTTACTAAC
GCTATGTCAGACTAATATTTAAATCAGAAAATTTAAATGCTGGTGCTGGTCAGACTTTTTTTGTTAGATTCTCTC
ATTTAAAAAAATACTGTTTGTGTTAAAGCATGCATAAAAATTTATGTATTGAAATATACTTAAAAATTCAAGATG
CTTCCCATTGTTGTAATATTTACCTGGAGGACTCGTACTTAGGTGCTTAACGTGAATTGAGTCTCCAAGGTCTC
CATGTGAAACAAGCAAAAAGAGAATTATCTGTAATGTTGTAATTTGTACCTAAGTTTTTTAATGAGTGAAATTTG
CATTATAAACTTTTTCCATTCTATAAATACATAAGTGAACCAAAGGTTTTTGTCTTCTCTTCACTGATTTGCTTT
AAAAAAAATAAAGATAATGATTTATTG

WO 2004/030615

PCT/US2003/028547

3151/6881
FIGURE 2910A

GGGGAGGCCATTTTCCGTTTCTGGGAGGAGTGAGGGGCAACGGGTCGGAGAAAAAGGAAAAAGAAGGGCTCAGC
GCCTCCCCGCCGGGCGTGGACAGAGGGGCACAGTTTCGGCAGGCGGGTGAGGTGCTGAGGGCCCGCCGGAGAT
GTTTTCTTGTGAGCAGCGGTGCAACCCAGGTTACAGTTCTCTGAGTCATCTCATCAATGCCTTCCATACACC
AAAAACACTTCTGTTTCTCTCAGTGGAGTGTGAGTTTCTCAAAACCAGCATCGAGATGTAGTTCTGAGCATGA
GGCTCCAGCAGTGAGTGTATGTTGAGTACTTCTGACGAAGCTTAACATTGTTCAATTGGCAAAGGAAAAAT
ATTGGAAGGTACAGATCCATGTTTCATGGAGCCAGCAAAAAGGATGAAGAAGAGCTTGGACACAACCGATAACTG
GCACATCCGTCCAGAACCCTTCTCCCTCTCAATCCCTCCTTCACTTAACCTAAGGGACCTTGGATTATCTGAACT
AAAAATTGGACAGATTGATCAGCTGGTAGAAAATCTACTTCTGGATTTTGTAAGGCAAAAACATTTCTTCCCA
TTGGCATACATCCCATGTCTCTGCACAATCCTTCTTTGAAAATAAATATGGTAACCTAGATATATTTAGTACATT
ACGTTTCTCTTGCTTGTATCGACATCATTCAAGAGCTCTTCAAAGCATTGTTTCAGATCTTCAGTACTGGCCAGT
TTTCATACAGTCTCGGGGTTTTAAACCTTTGAAATCAAGGACACGACGTCTCCAGTCTACCTCCGAGAGATTAGC
TGAAACACAGAATATAGCGCCATCATTGCTGAAGGGGTTTTCTTTGCGGGACAGAGGATCAGATGTTGAGAGTTT
GGACAAACTCATGAAAACCAAAATATACCTGAAGCTCACCAAGATGCATTTAAACTGGTTTTGCGGAAGGTTT
TCTGAAAGCTCAAGCACTCACACAAAAACCAATGATTCCCTAAGGCGAACCCTGCTGATTCTCTCGTTCTGCT
GCTATTGCGCATTTATGGACTTCTAAAAACCCATTTTTATCTGTCCGCTTCCGGACAACAACAGGGCTTGATTC
TGCAGTAGATCCTGTCCAGATGAAAAATGTCACCTTTGAACATGTTAAAGGGGTGGAGGAAGCTAAACAAGAATT
ACAGGAAGTTGTTGAATTCTTAAAAATCCACAAAAATTTACTATTCTTGGAGGTAACTTCCAAAGGAATTCT
TTTAGTTGGACCCCGAGGACTGGAAAGACACTTCTTGCCGAGCTGTGGCGGGAGAAGCTGATGTTCTTTTTTA
TTATGCTTCTGGATCCGAATTTGATGAGATGTTTGTGGGTGTGGGAGCCAGCCGTATCAGAAATCTTTTTAGGGA
AGCAAAGGCGAATGCTCCTTGTTTATATTTATTGATGAATTAGATTCTGTTGGTGGGAAGAGAATTGAATCTCC
AATGCATCCATATTCAAGGCAGACCATAAATCAACTTCTTGCTGAAATGGATGGTTTTAAACCCAATGAAGGAGT
TATCATAATAGGAGCCACAACTTCCCAGAGGCATTAGATAATGCCTTAATACGTCCTGGTCTGTTTTGACATGCA
AGTTACAGTTCCAAGGCCAGATGTAAAAGGTGCAACAGAAATTTTGAATGGTATCTCAATAAAATAAAGTTTGA
TCAATCCGTTGATCCAGAAATTATAGCTCGAGGTACTGTTGGCTTTTCCGGAGCAGAGTTGGAGAATCTTGTGAA
CCAGGCTGCATTAAAGCAGCTGTTGATGGAAGAAGAGTGTGGAATTTGATAACAAAAACAAAACCATCACAGCATATCATGAATC
TGGTCATGCCATTATTGCATATTACACAAAAGATGCAATGCCTATCAACAAAAGCTACAATCATGCCACGGGGGCC
AACACTTGGACATGTGTCCCTGTTACCTGAGAAATGACAGATGGAATGAAACTAGAGCCCAGCTGCTTGCACAAAT
GGATGTTAGTATGGGAGGAAGAGTGGCAGAGGAGCTTATATTTGGAACCGACCATATTACAACAGGTGCTTCCAG
TGATTTTGATAATGCCACTAAAATAGCAAAGCGGATGGTTACCAAATTTGGAATGAGTGAAAAGCTTGGAGTTAT
GACCTACAGTGATACAGGGAACTAAGTCCAGAAACCCAATCTGCCATCGAACAAGAAATAAGAATCCTTCTAAG
GGACTCATATGAACGAGCAAAACATATCTTGAAAACCTCATGCAAAGGAGCATAAGAATCTCGCAGAAGCTTTATT
GACCTATGAGACTTTGGATGCCAAAGAGATTCAAATTGTTCTTGAGGGGAAAAAGTTGGAAGTGAGATGATAACT
CTCTTGATATGGATGCTTGTGTTTTATTGCAAGAAATACAAGTAGCATTGCAGTAGTCTACTTTTACAACGCTT
TCCCCTCATTCTTGATGTGGTGTAAATTGAAGGGTGTGAAATGCTTTGTCAATCATTTGTACATTTATCCAGTTT
GGGTTATTCTCATTATGACACCTATTGCAAATTAGCATCCCATGGCAAATATATTTTAAAAAATAAAGAACTAT
CAGGATTGAAAACAGCTCTTTTGGGAATGTCAATTAGTTATTAAGTTGAAAGTAATTAATGATTTTATGTTTGG
TTACTCTACTAGATTGATAAAAATTGTGCCCTTTAGCCTTCTATATACATCAGTGGAACTTAAGATGCAGTAAT
TATGTTCCAGATTGACCATGAATAAAATATTTTAAATCTAAATGTAGAGAAGTTGGGATTAAGAGCAGTCTCGG
AAACACAGAGCCAGGAATATAGCCTTTTGGCATGGTGCCATGGCTCACATCTGTAATCCCAGCACTTTTGGAGGC
TGAGGCGGGTGGATTGCTTGAGGCCAGGAGTTTCAGAGCCAGCCTGGCCAACGTGGTGAAACGCTGTCTCTACTAA
AATACAAAAAATAGGGCTGGGCGCGGTTGCTCACGCCTGTAATCCCAGCACTTTTTCAGAGGCCAAGGCGGGCAA
ATCACCTGAGGTCAAGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAACATGCAAAAAT
TACCTGGGCATGGTGGCAGGTGCTTATAATCCCAGCTACTCTGGGGGCCAAGGCAGGAGAATTGCTTGAGCCTGG
GAGATGGAGGTTGCAGTGAGCTGAGATCATGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGCCTCAA
AAAAAATTAAAAATAAATTTAAATACAAAAAATAAGCCAGGTGTGGGGTGCATGCCTGGAATCCCAGCTACTT
GAGAGGCTGAGGCACGAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACAGGAGCCACTG
CACTCCAGCCTGGGTGACAGAGTGAGACTCTGTCTCAAAAAAATAAATAAATTTATTATAACCTTTCAGAAAT

WO 2004/030615

PCT/US2003/028547

3152/6881
FIGURE 2910B

GCTGTGTGCATTTTCATGTTCTTTTTTTTAGCATTACTGTCACCTCTCCCTAATGAAATGTACTTCAGAGAAGCAG
TATTTTGTTAAATAAATACATAACCTCATTCTGAATAATGTCCTCATTTGACTATAACTGTGCTTGGTTTCAA
AAGCAAAATTAAACAAAATCTCAGTCCCCTCCGAAGTGAACTTTGTGTTACCCTGCGTCAGAAATGCCAAGTTG
TGTTTACTTTTCATTTCAGATTTTGTGAATATGAACATGCTGTTATAGGATCTACAGATGAATATTAACTCAATA
GAAAAATTATTTTAGAACACATTGTATTGGTATTACAACCAGATTATATTCTTGACGTTGACTTCATTAAAT

WO 2004/030615

PCT/US2003/028547

3153/6881
FIGURE 2911

ACCGCCATCTTCCAGTAATTCGCCAAAGTGACGAACACAAAGAGAAAGAGGAGGGGCACCCGATATATGTTCTTT
AGGCCTTTTAGAAAACATGGAGTTGTTCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAGAC
ATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACAAT
GTTACCCAGCATGCTGTTGGCATTGTTGTAAACACACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATGTG
TTTATTGAGCACATTAAGCACTCTAAGAGCCGAGACAGCTTCCTGAAACGCATGAAGGAAAATGATCAGAAAAAG
AAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTTGTG
AGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTATGAATTCATGGCATAATAGGTGTTAAAAAAA
AATAATAAGGATCTCTGGGCTAC

WO 2004/030615

PCT/US2003/028547

3154/6881
FIGURE 2912

VTNTRKRRGTRYMFFRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTIVQKGMPhKCYHGKTGRVYNVTQHAVGIV
VNTQVKGKILAKRINVFIEHIKHSKSRDSFLKRMKENDQKKKEAKEKGTWVQLKRQFAPPREAHFVRTNGKEPEL
LEPIPYEFMA

WO 2004/030615

PCT/US2003/028547

3155/6881
FIGURE 2913A

CACTGCTCTGACTGCGTCCTCCCCAGGCTGAAGTGTCTCAGGTTTCATGTGGATTTGCCAGTAATGGATGGCT
CCACCGAGGCCAGGTTGGGGAAGTTACAGCTCGAGGACACTAGGGGACGAAAACTTCAAAAAGAAGACTCTTTT
TATTAATATTTTGGCGTTCTTTTGGAGAGGAACTTTGGGATGTAGCCTTTACCTGTTTCTGAAATTTGACATC
CAAAAAGCCTTTTGGAAAACACCATTCTAAATTTATCCTGTTCTGAATCATCATCGCTTCTGATAGATGCAGTTG
CTTGCTGACATCGTGATCTTTGATTTTGTACAACGCTATTTGGGCTAACTTTTGGGATTTTACTTTGTGCTTAGA
ATTTGAAAGTAGTATTTCATTGAAAAGAGACTCCAAGAAAATACTCGAAGACATCAAAAAGCTGGATTTCGAGGGTAT
AACGTGTTTTGTTTTGTTTTTAAATTAGAAAAATAAGGAATTGCAGTGTGATTTTCTTTCCCCCTTTAACTTAG
AGGAACGAGGATTATACAGAAATTTGAAATTTCAACAAGAAAACTTAAGCTTCCTTGGATTCCCACGTCAAAGG
AAAGTTTCAAGCTTTTCAAGAGGAGTTCTCACTCGAAGATAAAGAACAGCTCGCTAACCCAGAAAGAGGAATCGAT
GCTCAGCTTTTATGTTGCACTTCTTAAAGTTGCAGAAATTAAGACAAATCTTTGAACCAAGAAAGAAAGAAATCTTA
GAAATGAAAAGAAAAGAAAGAAATGCCAGGCGCTGGAAGGGATTGAAAATGACACTCAGCCCATCTCTTGCAG
AGCTGCACAGGATTGGTGACTACCGCCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGCGACCCCTGCC
AGCCCCACATCGGCCGATCAAATGAAGAGGAGGAACTTCTGATTCTTCTCTAGAAAAGCAAACTCGATCCAAA
TACTGCACAGAAACCTCCGGTGTCCACGGTGACTCACCTATGGTTCGGGTACCATGGACACCCACAGTCTGGAG
TCCAAAGCCGAAAGAATTGCAAGGTACAAAGCAGAAAGAAGGCGACAGCTGGCAGAGAAGTATGGGCTGACTCTG
GATCCCAGGCGGACTCCGAGTATTTATCCGCTATACCAAGTCCAGGAAGGAGCCTGATGCTGTGAGAAGCGG
GGAGGAAAAAGTGACAAACAGGAAGAGTCAAGCAGAGATGCTAGTTCTCTGTACCCCGGGACCGAGACGATGGGG
CTCAGGACCTGTGCCGGTGAATCCAAGGACTATGCCCTCCATGTGGGTGACGGCTCTTCCGACCCGAGGTGCTG
CTGAACATAGAAAACCAAAGACGAGGTCAAGAGCTGAGTGCCACCCGCGAGGCCCATGACCTGTCCCCAGCAGCC
GAGAGTTCTCGACCTTCTCTTTCTCTGGGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCAAGCAGGCC
CACAGCTCCTCCCTGCAGCAGGCAGCCTCCCGAGCCCTCCTTTGGTGACCCACAGCTATCCCTGAGGCCCCGA
CCCAGTACAGGGAAACCCAAACATGAGTGGTTTCTCCAGAAAGATTCCGAAGGGGACACACCTTCACTTATCAAC
TGGCCTTCCAGAGTTAAAGTTAGAGAAAAATTGGTGAAGAGGAAAGTGCTCGAAACAGCCCTGAAGTGCCTCA
GAGTCCGTAAGTCAAGAGGAGACACCAGCCAGCGCCAGTCCATTACGTGTCAATTCAGTCTGAGCACTCAGCCTT
GATAGGGTCCCCAGCAAGGCAGCAGGCTCTACACGACAGCCAATCCGTGGCTATGTCCAACCCGAGATACCGGT
CACACCGCCAAGCTAGTGACGCCAGAAACCCAGAAAATGCATCTGAGTGTAGCTGGGTAGCATCAGCCACCCAG
AATGTCCCCAAACCTCCCAGCTTGACGGTTCTAGAAGGTGACGGAAGGGATAGCCAGTTCTCCATGTCTGCGAG
TCAAAAGCAGAAGAAGAAGAAGGGGAAGGAGAAGGAGAAGAAAAGAAGAAGATGTGTGCTTCACTGAAGCTCTC
GAGCAAAGCAAGAAAACCTACTGGCTTTGGAGGGTGATGGGCTAGTGAGAAGCCCAGAAGATCCCTCTAGAAAT
GAGGACTTTGGTAAGCCTGCTGTGAGCACAGTCACTTAGAGCATCAGAAGGAACCTGGAACAGTGGCACAACCC
CCTCAAGCTCCGCACCAGCCACTGAGAGGACAGGCAGGAGCGAGATGGTTCTCTACATTCAAAGTGAGCCTGTG
TCCCAAGACGCCAAACCAACTGGTCACAACAGGGAAGCCTCGAAAAGCGCAAGGTCCGTACCCGCTCTCTGTCA
GATTTACAGGCCCCCTCAGCTCCAGGCCTTGAAGTATAAGGACCCAGCTTCCAGGAGAGAGCTGGAGCTGCCC
AGCTCCAAGACCGAAGGGCCTTATGGGGAGATCAGCATGCTGGACACAAAAGTCTCTGTGCCCCAGCTCCGAAGT
GCGTTTCTGGCATCTGCCAACGCCTGCAGGAGACCTGAAGTCAAATCACGGGTGGAGAGGTCCGGCTGAAGGACCT
GGCTTGCCACCGGTGTGGAACGGGAGAGAGGGTCCCGAAACCAAGACGCTATTTTTCTCCTGGTGAAAGTAGA
AAAACCTTCCGAGAGATTTAGAACCCAACCTATAACTTCAGCAGAACGAAAGGAATCGGATAGGTGCACCTTACAT
TCAGAAACGCCAACTGTGATGATGAAGAAAAGGTGGATGAACGAGCCAAGCTGAGCGTCGCCGCCAAGAGGTTG
CTTTTTCAGGGAGATGGAAGAAATCTTTTATGAACAAATGTTCCAAAGCGACGCTCAAGAAACACAGCTGTGGAG
CAGAGGCTACGCCGTCTGCAGGACAGTCCCTCACCCAGCCCATCACCCTGAAGAGGTGGTCATCGCAGCCACT
GAACCTATCCCCGCTTCTGTGTTCTGGGGGACCCACCCTGTAATGGCGAGACTTCTAGCCCCACTGTAGCTAGG
AGCGCTGTGCAGCCTGCCAGATTGCAGGCCTCTGCTCACCAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGC
AAAGAGCTTGCTGAGCAAGGAGAACCTGATTCTCCTCACTCTAAGCTTGGCCGAAAAGTTGGCCTTGTTTAACAAA
TTGTCCCAGCCAGTCTCAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATGAACGCTCGC
TATCAAACCTCAGCCAGTCACTTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAGCTCATTCCTTTCTCACCTGCC
GTGAACACATCAGTGTCTACCGTAGCATCCACGGTGTCTCAATGTATGCCGAGATCTTCGCACAAAGCCACCT
CTTGACCACAATGCAAGTGCCACTGACTATAAGTTTTCTTCTTCAATAGAAAATTCGGACTCTCCAGTTAGAAGC
ATTCTGAAATCGCAAGCTTGGCAGCCTTTGGTAGAGGGTAGCGAGAACAAAGGAATGTTGAGAGAATATGGAGAG

WO 2004/030615

PCT/US2003/028547

3156/6881
FIGURE 2913B

ACAGAAAGCAAGAGAGCTTTGACAGGTCGAGACAGTGGGATGGAGAAGTATGGGTCCTTTGAGGAAGCAGAAGCA
TCCTACCCCATCCTGAACCGAGCCAGGGAAGGAGACAGCCATAAGGAATCTAAATATGCTGTTCCAGAAAGAGGA
AGCCTGGAACGGGCGAACCCTCCCATCACCCACCTCGGGGATGAACCGAAGGAATTTTCCATGGCTAAAATGAAT
GCACAAGGAACTTGGACTTGAGGGACAGGCTGCCCTTTGAAGAGAAGGTGGAGGTGGAGAATGTTATGAAAAGG
AAGTTTTCTACTAAGAGCGGCAGAGTTCGGGGAGCCCACTTCCGAGCAGACGGGGACAGCTGCTGGGAAAATATT
GCTCAAACCACAGCCCCCGTGTCTGGAAGCCCCAGGATTCTTCGGAACAGCCACAGGAGAAGCTCTGCAAGAAT
CCATGTGCGATGTTTGTCTGCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTTGACTCACCCAGCAAAACC
ATGTCTATTAAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGATTGGAGAAAACAGACTCAGCAGGAGG
CAGGAGGGCGGCAAGGCGCCGGCCAGCAGCCTGCACACCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCGGGTC
ACAGAAAGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAGGCCTGGAAG
ACGAGAGGCAGAGGAGCGGCCAACGACTCGACCCAGTTCACGTGTGGCTGGCAGGATGGTGAAGAAAGGTTTGGCG
TCACCTACTGCCATAACCCCACTAGCCTCACCCATTTGCGGTAAAACAAGAGGCACCACACCCGTTTCCAAACCC
CTGGAAGATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTGAAGTTGGACAGGCTGGAAACCTTTCTA
AGAAGGCTGAATAACAAAGTTGGCGGGATGCACGAAACGGTGTCTACTGTACCGGCAAATCTGTGAAGGAGGTG
ATGAAGCCAGATGATGATGAAACCTTTGCCAAATTTTACCGCAGCGTGGATTATAATATGCCAAGAAGTCTGTG
GAGATGGATGAGGACTTCGATGTCAATTTTCGATCCTTATGCACCCAAATTGACGTCTTCGTGGCCGAGCACAAG
CGGGCAGTTAGGCCCAAGCGCCGGGTTTCAAGCCTCCAAAACCCCTGAAATGCTGGCGGCAAGAGAAGATCTC
CTTCAGGAATACACTGAGCAGAGATTAACGTTGCCCTTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCT
TCCAACCTCAACTTCTCAGAAGTCACCCTGGCGGGTTTAGCCAGTAAAGAAAACCTCAGCAACGTGAGCCTGCGG
AGCGTCAACCTGACGGAACAGAACTCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTAAA
GGAAGAAGACATGTGCAGACCAGGCTGGTGAACCTCGAGCTTCGGCGCTCAACAGTGGGACTGCTTCCTCCTG
CTCTCTCCCCACTGCTGCTTCTGTGGGTAGGAGAGTTTGCAAACGTCATAGAAAAGGCGAAGGCCTCAGAACCT
GCAACTTTAATTCAGACAAAGAGGGAACCTTGGTTGTAGAGCTACTTATATCAAACCATGAGAAGGAATTAAT
ACACACACTCATGCAGCCAAAGACTTCTGGAAGCTTCTGGGTGGCCAAACCAGTTACCAATCTGCTGGAGACCCA
AAAGAAGATGAACTCTATGAAGCAGCCATAATAGAACTAACTGCATTTACCGTCTCATGGATGACAAAACCTTGTT
CCTGATGACGACTACTGGGGGAAAATTCCGAAGTCTCCCTTCTGCAACCCAAAGAGGTACTGGTGTGTTGATTTT
GGTAGTGAAGTTTACGTATGGCATGGGAAAGAAGTCACATTAGCACAAACGAAAATAGCATTTTCAGCTGGCAAG
CACTTATGGAATGGAACCTTTGACTATGAGAACTGTGACATCAATCCCCTGGATCCTGGAGAATGCAATCCGCTT
ATCCCCAGAAAAGGACAGGGGCGGCCGACTGGGCGATATTTGGGAGACTTACTGAACACAATGAGACGATTTTG
TTCAAAGAGAAGTTTCTGGATTGGACGGAAGTGAAGAGATCGAATGAGAAGAACCCCGGGGAACCTTGCCAGCAC
AAGGAAGACCCAGGACTGATGTCAAGGCATACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGC
ACCATCCTGGACGGAGTGAACGTGGGCCGTGGCTATGGCCTGGTGAAGGACACGACAGGAGGCGAGTTTGAGATC
ACCAGCGTTTCCGTGGATGTCTGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGCATCGGGCAG
TTCCATGAGGGGGATGCCTATGTGGTCAAGTGAAGTTTATGGTGAGCAGGCGAGTGGGAAGTTCGCCAGAAGGGA
GAGCACTCGGTGAGGGCAGCCGGCAAAGAGAAGTGCCTTACTTCTTCTGGCAAGGCCGGCACTCCACCGTGAGT
GAGAAGGGCACGTGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGGGGGGCCAGGTCCAGGTTCTCCAGGGA
AAGGAGCCCCCTGTTTCTGCAAGTGTTCAGGGGGGGATGGTGGTGCCTCGGGGAGGCGGGAAGAGGAAGAA
GAAAATGTGCAAAGTGAGTGGCGGCTGTACTGCGTGCCTGGAGAGGTGCCCGTGAAGGGAATTTGCTGGAAGTG
GCCTGTCACTGTAGCAGCCTGAGGTCCAGAACTTCCATGGTGGTGTCTAACGTCAACAAGGCCCTCATCTACCTG
TGGCACGGATGCAAAGCCAGGCCACACGAAGGAGGTGGAAGGACCGCTGCGAACAAGATCAAGGAACAATGT
CCCCTGGAAGCAGGACTGCATAGTAGCAGCAAAGTCACAATACACGAGTGTGATGAAGGCTCCGAGCCACTCGGA
TTCTGGGATGCCTTAGGAAGGAGAGACAGGAAAGCCTACGATTGCATGCTTCAAGATCTGGAAGTTTAACTTC
GCGCCCCGCTGTTTCATCCTCAGCAGCTCCTCTGGGGATTTTGCAGCCACAGAGTTTGTGTACCCTGCCGAGCC
CCCTCTGTGGTCAGTTCCATGCCCTTCTCTGCAGGAAGATCTGTACAGCGCGCCCCAGCCAGCACTTTTCTTGT
GACAATCACACAGAGGTGTACCTCTGGCAAGGCTGGTGGCCATCGAGAACAAGATCACTGGTTCCGCCCCGATC
CGCTGGGCCTCCGACCGGAAGAGTGCATGGAGACTGTGCTCCAGTACTGCAAAGGAAAAATCTCAAGAAACCA
GCCCCAAGTCTTACCTTATCCACGCTGGTCTGGAGCCCCTGACATTACCAATATGTTTCCAGCTGGGAGCAC
AGAGAGGACATCGCTGAGATCACAGAGATGGACACGGAAGTTTCCAATCAGATCACCTCGTGGGAAGACGTCTTA

WO 2004/030615

PCT/US2003/028547

3157/6881
FIGURE 2913C

GCCAAGCTCTGTAAAACCATTTACCCGCTGGCCGACCTCCTGGCCAGGCCACTCCCGGAGGGGGTCGATCCTCTG
AAGCTTGAGATCTATCTCACCAGCAAGACTTCGAGTTTGCACTAGACATGACGAGGGATGAATACAACGCCCTG
CCCGCTGGAAGCAGGTGAACCTGAAGAAAGCAAAGGCCCTGTTCTGAGTGGGGAGACGCCAGAGGAGCCTCACG
GTCACGTCCAACAACCACTGCACCAGGGAAATGGATATATATTTTTGGACTGGTGTTCACAAAGTATTTT
TCAATCAGAGTTTTCAGAACCTGACATTGTTAAAGATACTGCTTGTCGGGAGTTGTGTATTTGTAAATGTTCA
AGGGAAGTGTGGAACTTCTTTCCACCATTGAGGAGTTATCAGAATTAATAAAAGTATCTGTTATGTGCACT
TAAGCCGCAGCTGCTATAGATAGCACTGCCTTCTTGTTCCAGCTAGGCAATGCCTTTTTTTTTTTTTTTGAAGC
AGTTCTCTTTATAAAAGTGTATTTTGATAGTTTGTGGATTCTAAAATATATATATATTTATATAAACACCATATA
AGTCAAATATGTATTTAACAAGCAATATGTATTCATTCACTTTCAAGATTGTTTTGGTGTCAAAATAACATGA
AAAGGTAGATGGAGTTGCTTCTGTTGAATTAGCTCTGCCACCAATATGTATCTTCATACACGTTTGGAAATGTTT
CCTGCAGCATTAGGTATGACTTGTTCTGAGTACTGCTTCCGGTGCTAAAATGAACAAAGAATTGTACTTAATGG
CATGGACTCTGGAGAATCTATGCGAATCAACCTTTCTACCTTAATATCTCCCCAAAAATGTATAGTGCCTTGTTT
TTATGTACAGTTTATATACAGAAAAGTTTGCTCTGCATTTTTGATGATGGTTTGGAAACATTATCTACAATTTTAC
TCTCAAATAGTCAAATAAAAACATCTCAATTTCTAATACCGGTTGTAAACAGTACACATGTCATTTTGTGATAT
AGGACTCCCAAATAAAAGTATCAGAATAAACACAACAATTAAGTGGT

WO 2004/030615

PCT/US2003/028547

3158/6881
FIGURE 2914

CAGACGCTGCTGCCGAGGAAAACCTTGTATTATTAGGCATGGTCAACCCACCGTGTTCTTCGACATTGCCATCG
ACGGCGAGCCCTTGGGCCGCGTCTCCTTTTAGCTGTTTGCAGACAAGTCCCAAAGACAGCAGAAAATTTTCGTG
CTCTGAGCACTGGAGAGAAAGGATTTAGTTATAAGGGTTCCTGCTTTCACAGAATTATTCCAGGGTTTATGTATC
AGGGTCGTGACTTCACACGCCATAATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAAATTTGAAGATGAGAACT
TCATCCTAAAGCATAACAGGTCCCTGGCATCTTGTCCATGGCAAATGCTGGACCAACACAAATGGTTCCCAGTTTT
TCATCTGCACTGCCAAGACTGAGTGGTTGGATGGCAAGCATGTGGTCTTGGCAAAGTGAAAGAAGGCATGAATA
TTATGGAGGCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACTGTGGAC
AACTCGAATAAGTTTGACTTGTGTTTTATCTTAACCACCAGACCATTCTTCTGTAGTTCAGGAGAACACCCCTTC
CACCCCATTTGCTCGCAGTATCCTAGAATCTTTGTGCTCTTGCTGCAGTTCATGTTTTCTTGTTCCTCCCAT
GCCTAGCTGGATTGCAGAGTTAAGTTTATGATTATGAAATAAAAACCAAATAACAA

WO 2004/030615

PCT/US2003/028547

3159/6881
FIGURE 2915

GQPHRVLRHCHRRRALGPRLLLALFADKFPKTAENFRALSTGEKGF SYKGSCFHRIIPGFMYQGRDFTRHNGTGG
KSIYGEKFEDENFILKHTGPGILSMANAGPNTNGSQFFICTAKTEWLDGKHVVFGKVKEGMNIMEAMERFGSRNG
KTSKKITIADCGQLE

WO 2004/030615

PCT/US2003/028547

3160/6881
FIGURE 2916A

ATGAAAGTGACCGTGTGCTTCGGACGGACCCGGGTGGTCGTGCCGTGCGGGGACGGCCACATGAAAGTTTTTCAGC
CTCATCCAGCAGGCGGTGACCCGCTACCGGAAGGCCATCGCCAAGGATCCAACTACTGGATACAGGTGCATCGC
TTGGAACATGGAGATGGAGGAATACTAGACCTTGATGACATTCTTTGTGATGTAGCAGACGATAAAGACAGACTG
GTAGCAGTGTGTTGATGAGCAGGATCCACATCACGGAGGTGATGGCACCAGTGCCAGTTCCACGGGTACCCAGAGC
CCAGAGATATTTGGTAGTGAGCTTGGCACCAACAATGTCTCAGCCTTTCAGCCTTACCAAGCAACAAGTGAAATT
GAGGTCACACCTTCAGTCCTTCGAGCAAATATGCCTCTTCATGTTTCGACGCAGTAGTGACCCAGCTCTAATTGGC
CTCTCCACTTCTGTGAGTGATAGTAATTTTTCTCTGAAGAGCCTTCAAGGAAAAATCCACACGCTGGTCAACA
ACAGCTGGCTTCTCAAGCAGAACACTGCTGGGAGTCTTAAACCTGCGACAGGAAGAAAGATGAAAACTACAGA
AGCCTCCCGCGGGATACTAGTAAGTGGTCTAACCAATTTTCAGAGAGACAATGCTCGCTCGTCTCTGAGTGCCAGT
CACCCAATGGTGGGCAAGTGGCTGGAGAAACAAGAACAGGATGAGGATGGGACAGAAGAGGATAACAGTCGTGTT
GAACCTGTTGGACATGCTGACACGGGTTTGGAGCATATACCCAACCTTTCTCTGGATGATATGGTAAAGCTCGTA
GAAGTCCCCAACGATGGAGGGCTCTGGGAATCCATGTAGTGCCTTTTCAGTGCTCGAGGCGGCAGAACCCCTGGGG
TTATTAGTAAACGATTGGAGAAAGGTGGTAAAGCTGAACATGAAATCTTTTTCTGTGAGAAATGATTGCATTGTC
AGGATTAATGATGGCGACCTTCGAAATAGAAGATTTGAACAAGCACAAACATATGTTTCGCCAAGCCATGCGTACA
CCCATCATTTGGTTCCATGTGGTTTCTGACGAAATAAAGAGCAGTATGAACAACCTATCCCAAAGTGAGAAGAAC
AATTACTATTCAAGCCGTTTTAGCCCTGACAGCCAGTATATTGACAACAGGAGTGTGAACAGTGCAGGGCTTCAC
ACGGTGCAGAGAGCACCCCGACTGAACCACCCGCTGAGCAGATAGACTCTCACTCAAGACTACCTCATAGCGCA
CACCCCTCGGGAAAAACCACCATCCGCTCCAGCCTCGGCACCTCAGAATGTATTTAGTACGACTGTAAGCAGTGGT
TATAACACCAAAAAAATAGGCAAGAGGCTTAATATCCAGCTTAAGAAAGGTACAGAAGGTTTGGGATTGAGCATC
ACTTCCAGAGATGTAACAATAGGTGGCTCAGCTCCAATCTATGTGAAAAACATTTCTCCCCGGGGGGCGGCCATT
CAGGATGGCCGACTTAAGGCAGGAGACAGACTTATAGAGGTAAATGGAGTAGATTTAGTGGGCAATCCCAAGAG
GAAGTTGTTTCGCTGTTGAGAAGCACCAAGATGGAAGGAAGTGTGAGCCTTCTGGTCTTTTCGCCAGGAAGACGCC
TTCCACCAAGGGAAGTGAATGCAGAGCCAAGCCAGATGCAGATTCAAAAGAAACGAAAGCAGAAGATGAGGAT
ATTGTTCTTACACCTGATGGCACCAGGGAATTTCTGACATTTGAAGTCCCACTTAATGATTTCAGGATCTGCAGGC
CTTGGTGTGAGTGTCAAAGGTAACCGGTCAAAAGAGAACCACGCAGATTTGGGAATCTTTGTCAAGTCCATTATT
AATGGAGGAGCAGCATCTAAAGATGGAAGGCTTCGGGTGAATGATCAACTGATAGCAGTAAATGGAGAATCCCTG
TTGGGCAAGACAAACCAAGATGCCATGGAAACCCTAAGAAGGTCTATGTCTACTGAAGGCAATAAACGAGGAATG
ATCCAGCTTATTGTTGCAAGGAGAATAAGCAAGTGCAATGAGCTGAAGTCACCTGGGAGCCCCCTGGACCTGAG
CTGCCATTGAAACAGCGTTGGATGATAGAGAACGAAGAATTTCCCATTCCTCTACAGTGGGATTGAGGGGCTT
GATGAATCCCCCAGCAGAAATGCTGCCCTCAGTAGGATAATGGGTGAGTCAGGTAAATACCAGCTGTCCCCTACA
GTGAATATGCCCCAAGATGACACTGTCAATTATAGAAGATGACAGGTTGCCAGTGCTTCTCCACATCTCTCTGAC
CAGTCTCTTCCAGCTCCCATGATGATGTGGGGTTTGTGACGGCAGATGCTGGTACTTGGGCCAAGGCTGCAATC
AGTGATTACGCCGACTGCTCTTTGAGTCCAGATGTTGATCCAGTTCCTTGTCTTTCAACGAGAAGGATTTGGACGT
CAGAGTATGTCAGAAAAACGCACAAAGCAATTTTCAGATGCCAGTCAATTGGATTTGTTTAAACACGAAAATCA
AAAAGCATGGATTTAGGTATAGCTGACGAGACTAACTCAATACAGTGGATGACCAGAAAGCAGGTTCTCCAGC
AGAGATGTGGGTCTTCCCTGGGTCTGAAGAAGTCAAGCTCGTTGGAGAGTCTGCAGACCGCAGTTGCCGAGGTG
ACTTTGAATGGGGATATTCCCTTCCATCGTCCACGGCCGCGGATAATCAGAGGCAGGGGATGCAATGAGAGCTTC
AGAGCTGCCATCGACAAATCTTATGATAAACCCGCGGTAGATGATGATGATGAAGGCATGGAGACCTTGGAAGAA
GACACAGAAGAAAGTTCAAGATCAGGGAGAGAGTCTGTATCCACAGCCAGTGATCAGCCTTCCCACTCTCTGGAG
AGACAAATGAATGGAAACCAAGAGAAAGGTGATAAGACTGATAGAAAAAAGGATAAACTGGAAAAAGAAAGAA
AAAGATAGAGATAAGGAGAAGGATAAAATGAAAGCCAAGAAGGGAATGCTGAAGGGCTTGGGAGACATGTTTCAGG
TTTGGAACATCGAAAAGATGACAAGATTGAGAAAACGGGTAAAAATAAAAAATACAGGAATCCTTTACATCAGAA
GAGGAGAGGATACGAATGAAGCAGGAGCAGGAGAGGATTCAGGCCAAAACCTCGAGAATTTAGGGAACGACAAGCT
CGAGAGCGTGACTATGCTGAAATTCAAGATTTTCATCGGACATTTGGCTGTGATGATGAGTTAATGTATGGGGGA
GTTTCTTCTTATGAAGTTCCATGGCTCTCAACGCTAGACCTCAGAGCCACGAGAAGGGCATATGATGGATGCT
TTGTATGCCAAGTCAAGAAGCCGCGGAATTCACACCTCACCCTGTAGACAGTAACAGATCAACTCCTAGCAAT
CATGATCGGATACAGCGTCTGAGGCAAGAATTTTCAGCAAGCAAAAGCAAGATGAAGATGTAGAAGATCGTCGGCGG
ACCTATAGTTTTGAGCAACCTTGCCGAACGCACGSCCGGCGACGCAGAGCGGGCGACACTCGGTGTCCGTGGAG

WO 2004/030615

PCT/US2003/028547

3161/6881
FIGURE 2916B

GTGCAGATGCAGCGGCAGCGGCAGGAGGAGCGCGAGAGCTCCCAGCAGGCCAGCGCCAGTACAGCTCTCTGCCT
CGGCAAAGCAGGAAAAATGCCAGCTCGGTCTCCCAGGACTCTTGAGGAGCAGAACTACTCCCCTGGGGAAGGCTTC
CAGAGTGCCAAAGAGAACCCAGGTACTCCAGCTACCAAGGCTCCAGGAACGGCTACCTGGGAGGACATGGCTTC
AACGCCAGGGTCATGCTGGAACTCAGGAGCTCCTTCGCCAGGAACAGAGGCGGAAGGAGCAGCAGATGAAGAAG
CAGCCTCCTTCCGAGGGGGCCAGCAACTATGACTCGTATAAGAAAGTCCAGGACCCAGTTACGCCCCTCCAAG
GGGCCCTTCCGGCAAGATGTGCCCCCTCCCCTTCTCAGGTTGCGAGGCTGAACAGACTTCAGACTCCTGAGAAA
GGGAGGCCCTTCTATTCCTGA

WO 2004/030615

PCT/US2003/028547

3162/6881
FIGURE 2917

MKVTVCFGRTRVVVPCGDGHMKVFSLIQQAVTRYRKAIAKDPNYWIQVHRLEHGDGGILDLDLDDILCDVADDDKDRL
VAVFDEQDPHHGGDGTSSASTGTQSPEIFGSELGTNNVSAFQPYQATSEIEVTPSVLRANMPLHVRRSSDPALIG
LSTSVSDSNFSSEEPSRKNPTRWSTTAGFLKQNTAGSPKTCDRKKDENYRSLPRDTSNWSNQFQRDNARSSLSAS
HPMVGKWLEKQEDEDGTEEDNSRVEPVGHADTGLEHIPNFSLDDMVKLVEVPNDGGPLGIHVVPF SARGGRTL
LLVKRLEKGGKAEHENLFREND CIVRINDGDLNRNRF EQAQHMFQAMRTP I IWFHV VPAANKEQYEQLSQSEKN
NYYSSRFSPDSQYIDNRSVNSAGLHTVQRAPRLNHPPEQIDSHSRLPHSAHP SGKPPSAPASAPQNVFSTTVSSG
YNTKKIGKRLNIQLKKGTEGLGFSITSRDVTIGGSAPIYVKNILPRGAAIQDGR LKAGDR LIEVNGVDLVGKSQE
EVSLLRSTKMEGTV SLLVFRQEDAFHPRELNAEPSQM QIPKETKA EDEDIVLTPDGTREFLTTFEVPLNDSGSAG
LGVSVKGNRSKENHADLGIFVKSIINGGAASKDGR LRVNDQLI AVNGESLLGKTNQDAMETLRRSMSTEGNKRGM
IQLIVARRISKCNELKSPGSPGPPELP IETALDDRERRISHSLYSGIEGLDESPSRNAALS RIMGESGKYQLSPT
VNMPQDDTVI IEDDRLPVLP PHLSDQSSSSSHDDVGFVTADAGTWAKAAISDSADCSLSPDVPVLAFOREGFGR
QSMSEKRTKQFSDASQLDFVKTRKSKSMDLGIADETKLNTVDDQKAGSPSRDVGPSLGLKKSSSLESLOTAVAEV
TLNGDIPFHRPRPRIIRGRGCNESFRAAIDKSYDKPAVDDDDDEGMETLEEDTEESSRSGRESVSTASDQPSHSLE
RQMNGNQEKGDKTDRKKDKTGKEKKKDRDKEKDKMAKKGMLKGLGDMFRFGKHKRDKDKIEKTGKIKIQESFTSE
EERIRMKQE QERIQAKTREFRERQARERDYAEIQDFHRTFGCDELMYGGVSSYEGSMALNARPQSPREGHMMDA
LYAQVKKPRNSKPSPVDSNRSTPSNHDR IQRLRQEFQQAQDEDEDVDRRTYSFEQPWP NARPATQSGRHSVSVE
VQMQRQRQEERESSQAQRQYSSLPRQSRKNASSVSQDSWEQNYSPGEGFQSAKENPRYSSYQGSRNGYLGGHGF
NARVMLETQELLRQEQRKEQQMKKQPPSEGPSNYDSYKKVQDPSYAPPKGPFRRQDVPPSPSQVARLNRLQTPEK
GRPFYS

WO 2004/030615

PCT/US2003/028547

3163/6881
FIGURE 2918

CTATTCTGAAACGTGTTTTGCCCGAGGCCTGGGGTGCAGGCACCGCTGTACCTGGGGTGAGGGGAGCTGCCGGGC
CTTTCAGCCCGGTGGTCTCCACGATGCTCCCATCTGTGTGGACGACAATCAGTGTGCTTTTTCGGTGTTTCAGGC
TGTCCTCCGATCTGAAGGGCCGTCTACCAGACTAGAAGGAAAAACCGCTCCCTGGGCCGTCTCCAGCAGGGCTC
TCTGGCTGTTCTACCAAGAAGGGACGCTCACCTAGGCACCCCATATCTTTCCAAAGATACCTCTCAAAGACTT
GAAAACAGAGCCAAGAACAAGAACAGACAATGCCGAAGTCTGTGTGGTGCTGAGGAAAATGCTTGCCATCATTG
TCAAAGGGAAGGAAGAAAGGTGCTCCACAAACAAGAAACACCCCTCCCTTCCACCTGAGCCGCTCCACACAAGGTCA
CCGTCTTCATGCAGAGTTTCCAACAGACCGAGTTGGCCGCCACAGACAAGGCCTTGTGCAGGACCGCCCTCCAGA
CCTCCTTACAGATGGCAACTGGAGACCAGGGCCTCAAAACCACATTTCCACACTGGCTGAAGCTGCTGCAACTGC
TGCTTGCTTCCAAAATCAGCCTTCAGGCGGCACAGACCCCGCCACAGGAAGCCAGAGTCTCCATGCCCCACACACC
ACTGCTGGAACCTGAACCCTACCTTGGCCAAGTCATCCGGCAAACCTCTGGCCTGCAGGCTCTGTTACCCCCACGG
CCCAGCTGCTTTGCCGCCGAGTCCGAGTCTCCATCCGGACTCCGCCGAGCCTTCCCGAAGGCGCCGTCCGGGAC
CGCCCGAAGCGCCGGCCAGCGACCAGAAGGCCCAAAGCGTGTCTATCCAAGCCGGCTTTCGCTGGGCACAACCC
TAGTGGGAGCGGTGGGGACAGAGCCAGCTCGGCCAGACGGTCGGCAGGCCCCAGGAGGGCCATGAGTCAGAGGGC
AAGGCTGAACTGGATTTGGAGATCTTAGCCCAGGCTGACGGAGGCTCCCAAGAAGGGGGAGCAGGCCACACTCA
GCACCTGCGTGGGAGGGGCACCTGACCGCCAGATGGGCGGTCCACCTGAGCCGCACCCCTGGAGGGGCCTTTGG
TGCCCTCTGCCGGCCGCTCCATGTGCTGCCTTGAAGCAAGTACTCCACTTACTTTGGCTTTTGAAGTATTTC
CCTAGCCATCGACGAGTACAAGCCCCAGGATGCTACCACCAACCCGTCCCTGATCCTGGCCGCAGCACAGATGCC
CGCTTACCAGGAGCTGGTGGAGGAGGCGATTGCCTATGGCCGGAAGCTGGGCGGCACCTTGTCTACAGCTTGAC
ACAGCAAGAATATTCCTGTTCCCTTAACGCATTTCCAGGACCGTGGCCAATGGCAGACACCAGGTCATTAAACCC
AGTCACAGCTGAATGA

WO 2004/030615

PCT/US2003/028547

3164/6881
FIGURE 2919A

AGCCGCGCCACCCGCGCGCCGACACCCGGGAGGCCCGCCAGCCCGCGGGAGAGGCCAGCGGGAGTCGCGG
AACAGCAGGCCCGAGCCACCGCGCGGGGCCCGGACGCCGCGCGGAAAAGATGAATTTACAACCAATTTTCTGG
ATTGGACTGATCAGTTTCAGTTTGTGTGTGTTGCTCAAACAGATGAAAATAGATGTTTAAAAGCAAATGCCAAA
TCATGTGGAGAATGTATACAAGCAGGGCCAAATTGTGGTGGTGCACAAATTCAACATTTTTACAGGAAGGAATG
CCTACTTCTGCACGATGTGATGATTTAGAAGCCTTAAAAAGAAGGGTTGCCCTCCAGATGACATAGAAAATCCC
AGAGGCTCCAAAGATATAAAGAAAAATAAAATGTAAACCAACCGTAGCAAAGGAACAGCAGAGAAGCTCAAGCCA
GAGGATATTACTCAGATCCAACCACAGCAGTTGGTTTTGCGATTAAGATCAGGGGAGCCACAGACATTTACATTA
AAATTCAAGAGAGCTGAAGACTATCCCATTTGACCTTACTACCTTATGGACCTGTCTTACTCAATGAAAGACGAT
TTGGAGAATGTAAAAAGTCTTGGAACAGATCTGATGAATGAAATGAGGAGGATTACTTCGGACTTCAGAATTGGA
TTTGGCTCATTTGTGGAAGACTGTGATGCCCTTACATTAGCACAAACACCAGCTAAGCTCAGGAACCCCTTGACA
AGTGAACAGAACTGCACCAGCCCATTTAGCTACAAAAATGTGCTCAGTCTTACTAATAAAGGAGAAATTTAAT
GAACTTGTGGAAAACAGCGCATATCTGGAAATTTGGATTCTCCAGAAGGTGGTTTTCGATGCCATCATGCAAGTT
GCAGTTTGTGGATCACTGATTGGCTGGAGGAATGTTACACGGCTGCTGGTGTTCACAGATGCCGGGTTTCAC
TTTGCTGGAGATGGGAACTTGGTGGCATTGTTTTACCAAATGATGGACAATGTCACCTGGAAAAATAATATGTAC
ACAATGAGCCATTATTATGATTATCCTTCTATTGCTCACCTTGTCAGAACTGAGTGAAAAATAATATTCAGACA
ATTTTTGCAGTTACTGAAGAATTTAGCCTGTTTACAAGGAGCTGAAAACTTGATCCCTAAGTCAGCAGTAGGA
ACATTATCTGCAATTTCTAGCAATGTAATTCAGTTGATCATTGATGCATACAATTCCTTTCTCAGAAGTCATT
TTGGAAAACGGCAAATTTGTCAGAAGGAGTAACAATAAGTTACAAATCTTACTGCAAGAACGGGGTGAATGGAACA
GGGGAAAATGGAAGAAAATGTTCCAATATTTCCATTGGAGATGAGGTTCAATTTGAAATTAGCATAACTTCAAAT
AAGTGTCCAAAAAGGATTCTGACAGCTTTAAATTAGGCCCTCGGGCTTTACGGAGGAAGTAGAGGTTATTCTT
CAGTACATCTGTGAATGTGAATGCCAAAGCGAAGGCATCCCTGAAAGTCCCAAGTGTCATGAAGGAAATGGGACA
TTTGAGTGTGGCGCGTGCAGGTGCAATGAAGGGCGTGTGGTAGACATTGTGAATGCAGCACAGATGAAGTTAAC
AGTGAAGACATGGATGCTTACTGCAGGAAGAAAACAGTTTCAAAATCTGCAGTAACAATGGAGAGTGGCTCTGC
GGACAGTGTGTTGTAGGAAGAGGGATAATACAAATGAAATTTATTCTGGCAAATCTGCGAGTGTGATAATTTT
AACTGTGATAGATCCAATGGCTTAATTTGTGGAGGAAATGGTGTTCGAAAGTGTGCTGTGTGTGAGTGCAACCCC
AACTACACTGGCAGTGCATGTGACTGTTCTTTGGATACTAGTACTTGTGAAGCCAGCAACGGACAGATCTGCAAT
GGCCGGGGCATCTGCGAGTGTGGTGTCTGTAAGTGTACAGATCCGAAGTTTCAAGGGCAAACGTGTGAGATGTGT
CAGACCTGCCTTGGTGTCTGTGCTGAGCATAAAGAATGTGTTTCAAGTGCAGAGCCTTCAATAAAGGAGAAAAGAAA
GACACATGCACACAGGAATGTTCTATTTTAACTTACCAAGGTAGAAAAGTCGGGACAAATTACCCACAGCCGGTC
CAACCTGATCCTGTGTCCCATTGTAAGGAGAAGGATGTTGACGACTGTTGGTTCTATTTTACGTATTCAGTGAAT
GGGAACAACGAGGTGATGTTTCTGTTGTTGAGAAATCCAGAGTGTCCCACTGGTCCAGACATCTTCAATTGTA
GCTGGTGTGTTGCTGGAATTTGTTCTTATTGGCCTTGCACTTGTGATATGGAAGCTTTTAAATGATAATTCAT
GACAGAAGGGAGTTTGCTAAATTTGAAAAGGAGAAAATGAATGCCAAATGGGACACGGGTGAAAATCCTATTTAT
AAGAGTCCCGTAACAACCTGTGGTCAATCCGAAGTATGAGGGAATAAGTACTGCCCCGTGCAATCCCAACAC
TGAATGCAAAGTAGCAATTTCCATAGTCACAGTTAGGTAGCTTTAGGGCAATATTGCCATGGTTTTTACTCATGTG
CAGGTTTTGAAAATGTACAATATGTATAATTTTTAAATGTTTTATTATTTTGAATAATGTTGTAAATTCATGC
CAGGGACTGACAAAAGACTTGAGACAGGATGGTTATTCTTGTGAGCTAAGGTCACATTGTGCCTTTTTGACCTTT
TCTTCTGGACTATTGAAATCAAGCTTATTGGATTAAGTGATATTTCTATAGCGATTGAAAGGGCAATAGTTAAA
GTAATGAGCATGATGAGAGTTTCTGTTAATCATGTATTTAACTGATTTTTAGCTTTACAAATATGTCAGTTTGC
AGTTATGCAGAATCCAAAGTAAATGTCCTGCTAGCTAGTTAAGGATTGTTTTAAATCTGTTATTTTGCTATTTGC
CTGTTAGACATGACTGATGACATATCTGAAAGACAAGTATGTTGAGAGTTGCTGGTGTAAAAATACGTTTGAAATA
GTTGATCTACAAAGGCCATGGGAAAAATTCAGAGAGTTAGGAAGGAAAAACCAATAGCTTTAAACCTGTGTGCC
ATTTTAAGAGTTACTTAATGTTTGGTAACTTTTATGCCTTCACTTTACAAATTCAGCCTTAGATAAAAGAACCG
AGCAATTTTCTGCTAAAAAGTCCTTGATTTAGCACTATTTACATACAGGCCATACTTTACAAAGTATTTGCTGAA
TGGGGACCTTTTGAAGTTGAATTTATTTTATTATTTTATTTTGTGTTAATGTCTGGTGTCTTCTATCACCTCTTCT
AATCTTTTAAATGTATTTGTTTGAATTTTGGGGTAAGACTTTTTTATGAGTACTTTTTCTTGAAGTTTTAGCGG
TCAATTTGCCTTTTTAAATGAACATGTGAAGTTATACTGTGGCTATGCAACAGCTCTCACCTACGCGAGTCTTACT
TTGAGTTAGTGCCATAACAGACCCTGTATGTTTACTTCTCACCATTGAGTTGCCCATCTGTGTTTCACTAGT

WO 2004/030615

PCT/US2003/028547

3165/6881
FIGURE 2919B

CACATTCTTGTTTTAAGTGCCTTTAGTTTTAACAGTTCACTTTTTACAGTGCTATTTACTGAAGTTATTTATTAA
ATATGCCTAAAATACTTAAATCGGA

WO 2004/030615

PCT/US2003/028547

3166/6881
FIGURE 2920

MNLQPIFWIGLISSVCCVFAQTDENRCLKANAKSCGECIQAGPNCGWCTNSTFLQEGMPTSARCDDLEALKKKGC
PPDDIENPRGSKDIKKKNVTNRSGTAEKLPEDITQIQPQQLVLRRLRSGEPQTFTLKFKRAEDYPIDLYYLM
LSYSMKDDLENVKSLGTDLMNEMRRITSDFRIGFGSFEKTVMPYISTTPAKLRNPCTSEQNCTSPFSYKNVLSL
TNKGEVFNELVGKQRISGNLDSPEGGFDAIMQVAVCGSLIGWRNVTRLLVFSTDAGFHFAGDGKLGIVLPNDGQ
CHLENNMYTMSHYDYPSIAHLVQKLSENNIQTIFAVTEEFQPVYKELKNLIPKSAVGTLNANSSNVIQLIIDAY
NSLSSEVILENGKLSEGVTSYKSYCKNGVNGTGNGRKCNSISIGDEVQFEISITSNKCCKDSDFSIRPLGF
TEEVEVILQYICECECQSEGIPEPKCHEGNGTFECGACRCNEGRVGRHCECSTDEVNSEDMDAYCRKENSSEIC
SNNGECVCGQCVCRKRDNTNEIYSGKFCECDNFNCDRSNGLICGGNGVCKCRVCECNPNYTGSAACDCSLDTSTCE
ASNGQICNGRGICECGVCKCTDPKFQGGTCEMCQTCLGVCAEHKECVQCRAFNKGEKKDTCTQECYFNITKVES
RDKLPQPVQPDVSHCKEKDVDDCWFYFTYSVNGNNEVMHVVENPECPTGPDIIPIVAGVVAGIVLIGLALLLI
WKLLMI IHDRREFAKFEKEKMNKWDGTGENPIYKSAVTTVVNPKYEGK

WO 2004/030615

PCT/US2003/028547

3167/6881
FIGURE 2921A

GCTTCAGTCCCGCGACCGAAGCAGGGCGCGCAGCAGCGCTGAGTGCCCCGGAACGTGCGTCGCGCCCCCAGTGTC
CGTCGCGTCCGCCGCGCCCCGGGCGGGGATGGGGGGGCCAGACTGAGCGCCGCACCCGCCATCCAGACCCGCCGG
CCCTAGCCGCAGTCCCTCCAGCCGTGGCCCCAGCGCGCACGGGCGATGGCGAAGGCGACGTCCGGTGCCGCGGGG
CTGCGTCTGCTGTTGCTGCTGCTGCTGCCGCTGCTAGGCAAAGTGGCATTGGGCCTCTACTTCTCGAGGGATGCT
TACTGGGAGAAGCTGTATGTGGACCAGGCAGCCGGCACGCCCTTGCTGTACGTCCATGCCCTGCGGGACGCCCT
GAGGAGGTGCCAGCTTCCGCTGGGCCAGCATCTCTACGGCACGTACCGCACACGGCTGCATGAGAACAAGTGG
ATCTGCATCCAGGAGGACACCGGCTCCTCTACCTTAACCGGAGCCTGGACCATAGCTCCTGGGAGAAGCTCAGT
GTCCGCAACCGCGGGCTTTCCCTGCTCACCGTCTACCTCAAGGTCTTCTGTACCCACATCCCTTCGTGAGGGC
GAGTGCCAGTGGCCAGGCTGTGCCCGGTATACTTCTCTTCTTCAACACCTCCTTTCCAGCCTGCAGCTCCCTC
AAGCCCCGGGAGCTCTGCTTCCCAGAGACAAGGCCCTCCTTCCGCATTGGGAGAACCAGCCCCAGGCACCTTC
CACCAGTTCGGCTGCTGCTGTGAGTCTTGTGCCCAACATCAGCGTGGCCTACAGGCTCCTGGAGGGTGAG
GGTCTGCCCTTCCGCTGCGCCCCGACAGCCTGGAGGTGAGCACGCGCTGGGCCCTGGACCGCGAGCAGCGGGAG
AAGTACGAGCTGGTGGCCGTGTGCACCGTGCACGCCGCGCGCGAGGAGGTGGTGTATGGTGCCCTTCCCGGTG
ACCGTGTACGACGAGGACGACTCGGCGCCACCTTCCCCGCGGGCGTCGACACCGCCAGCGCCGTGGTGGAGTTC
AAGCGGAAGGAGGACACCGTGGTGGCCACGCTGCGTGTCTTCGATGCAGACGTGGTACCTGCATCAGGGGAGCTG
GTGAGGCGGTACACAAGCAGCTGCTCCCCGGGGACACCTGGGCCAGCAGACCTTCCGGGTGGAACACTGGCCC
AACGAGACCTCGGTCCAGGCCAACGGCAGCTTCGTGCGGGCGACCGTACATGACTATAGGCTGGTTCTCAACCGG
AACCTCTCCATCTCGGAGAACCGCACCATGCAGCTGGCGGTGCTGGTCAATGACTCAGACTTCCAGGGCCCAGGA
GCGGGCGTCTCTTGTCTCACTTCAACGTGTGGTGTGCCGGTCAGCCTGCACCTGCCAGTACCTACTCCCTC
TCCGTGAGCAGGAGGGCTCGCCGATTTGCCAGATCGGGAAAGTCTGTGTGGAAAAGTCCAGGCATTAGTGGC
ATCAACGTCCAGTACAAGCTGCATTCTCTGGTGCCAACTGCAGCACGCTAGGGGTGGTCACTCAGCCGAGGAC
ACCTCGGGGATCCTGTTTGTGAATGACACCAAGGCCCTGCGGCGGGCCAAAGTGTGCCGAACCTCACTACATGGTG
GTGGCCACCGACCAGCAGACCTCTAGGCAGGCCAGGCCAGCTGCTTGTAAACAGTGGAGGGGTACATATGTGGCC
GAGGAGGCGGGCTGCCCCCTGTCTGTGAGTGCAGTCAAGAGACGGCTGGAGTGTGAGGAGTGTGGCGGCTGGGC
TCCCCAACAGGCAGGTGTGAGTGGAGGCAAGGAGATGGCAAAGGGATCACCAGGAACCTTCTCCACCTGCTCTCCC
AGCACCAAGACCTGCCCCGACGGCCACTGCGATGTTGTGGAGACCCAAGACATCAACATTTGCCCTCAGGACTGC
CTCGGGGCGAGCATTGTTGGGGGACACGAGCCTGGGGAGCCCCGGGGGATTAAAGCTGGCTATGGCACCTGCAAC
TGCTTCCCTGAGGAGGAGAAGTGCTTCTGCGAGCCCCAAGACATCCAGGATCCACTGTGCGACGAGCTGTGCCGC
ACGGTGATCGCAGCCGCTGTCTCTTCTCTTCTCATCGTCTCGGTGCTGCTGTGCTTCTGCATCCACTGCTAC
CACAAGTTTGCCACAAGCCACCATCTCTCAGCTGAGATGACCTTCCGGAGGCCCGCCAGGCCTTCCCGGTG
AGCTACTCCTCTTCCGGTGCCCGCCGGCCCTCGCTGGACTCCATGGAGAACCAGGTCTCCGTGGATGCCTTCAAG
ATCCTGGAGGATCCAAAGTGGGAATTCCTCGGAAGAACTTGGTTCTTGAAAAACTCTAGGAGAAGGCGAATTT
GGAAAAGTGGTCAAGGCAACGGCCTTCCATCTGAAAGGCAGAGCAGGTACACCACGGTGGCCGTGAAGATGCTG
AAAGAGAACGCCTCCCCGAGTGAGCTGCGAGACCTGCTGTGAGAGTTCAACGTCTGAAGCAGGTCAACCACCCA
CATGTATCAAAATGTATGGGGCTGCAGCCAGGATGGCCGCTCCTCCTCATCGTGGAGTACGCCAAATACGGC
TCCCTGCGGGGCTTCTCCGCGAGAGCCGCAAAGTGGGGCTGGCTACCTGGGCAGTGGAGGCAGCCGCAACTCC
AGCTCCCTGGACCACCCGGATGAGCGGGCCCTCACCATGGGCGACCTCATCTCATTGCTGGCAGATCTCACAG
GGGATGCAGTATCTGGCCGAGATGAAGCTCGTTATCGGGACTTGGCAGCCAGAAACATCCTGGTAGCTGAGGGG
CGGAAGATGAAGATTTCCGATTTCCGCTTGTCCCGAGATGTTTATGAAGAGGATTCCCTACGTGAAGAGGAGCCAG
GGTCCGATTCCAGTTAAATGGATGGCAATTGAATCCCTTTTTGATCATATCTACACCACGCAAAGTGATGTATGG
TCTTTTGGTGTCTGCTGTGGGAGATCGTGACCCTAGGGGGAACCCCTATCCTGGGATTCTCTGAGCGGCTC
TTCAACCTTCTGAAGACCGGCCACCGGATGGAGGCGAGACAACCTGCAGCGAGGAGATGTACCGCTGATGCTG
CAATGCTGGAAGCAGGAGCCGGAACAAAGCGGTGTTTGGCGACATCAGCAAAGACCTGGAGAAGATGATGGTT
AAGAGGAGAGACTACTTGGACCTTGGCGCTCCACTCCATCTGACTCCCTGATTTATGACGACGGCTCTCAGAG
GAGGAGACACCGCTGGTGGACTGTAATAATGCCCCCTCCCTCGAGCCCTCCCTTCCACATGGATTGAAAAACAA
CTCTATGGCATGTACAGCCGAACTGGCCTGGAGAGAGTCTGTACCACTCACGAGAGCTGATGGCACTAACACT
GGGTTTCCAAGATATCCAAATGATAGTGATATGCTAACTGGATGCTTTCACCCTCAGCGGCAAAATTAATGGAC
ACGTTTGATAGTTAACATTTCTTTGTGAAAGGTAATGGACTCACAAGGGGAAGAAACATGCTGAGAATGGAAAGT

WO 2004/030615

PCT/US2003/028547

3168/6881
FIGURE 2921B

CTACCGGCCCTTTCTTTGTGAACGTCACATTGGCCGAGCCGTGTTTCAGTTCCCAGGTGGCAGACTCGTTTTTGGT
AGTTTGTTTTAACTTCCAAGGTGGTTTTACTTCTGATAGCCGGTGATTTTCCCTCCTAGCAGACATGCCACACCG
GGTAAGAGCTCTGAGTCTTAGTGGTTAAGCATTCTTTCTCTTCAGTGCCAGCAGCAGCCAGTGTGGTCTGTG
TCCATCAGTGACCACCAACATTCTGTGTTACATGTGTGGGTCCAACACTTACTACCTGGTGTATGAAATTGGAC
CTGAACTGTTGGATTTTTCTAGTTGCCGCCAAACAAGGCAAAAAAATTTAAACATGAAGCACACACAAAAAAG
GCAGTAGGAAAAATGCTGGCCCTGATGACCTGTCTTATTGAGAATGAGAGACTGCGGGGGGGGCTGGGGGTAG
TGTCAATGCCCCCTCAGGGCTGGAGGGGAAGAGGGGCCCCGAGGATGGGCCTGGGCTCAGCATTGAGATCTTGA
GAATGATTTTTTTTTAAATCATGCAACCTTTCTTAGGAAGACATTTGGTTTTTCATCATGATTAAGATGATTCTTA
GATTTAGCACAAATGGAGAGATTCCATGCCATCTTTACTATGTGGATGGTGGTATCAGGGAAGAGGGCTCACAAGA
CACATTTGTCCCCGGGGCCACCACATCATCTCAGTGTTCTGGTACTGAGCAGCCACTACCCCTGATGAGAACA
GTATGAAGAAAGGGGGCTGTTGGAGTCCCAGAATTGCTGACAGCAGAGGCTTTGCTGCTGTGAATCCCACCTGCC
ACCAGCCTGCAGCACACCCACAGCCAAGTAGAGGCGAAAGCAGTGGCTCATCTACCTGTTAGGAGCAGGTAGG
GCTTGTACTCACTTTAATTTGAATCTTATCAACTTACTCATAAAGGGACAGGCTAGCTAGCTGTGTTAGAAGTAG
CAATGACAATGACCAAGGACTGCTACACCTCTGATTACAATTCTGATGTGAAAAAGATGGTGTGGCTCTTATA
GAGCCTGTGTGAAAGGCCCATGGATCAGCTCTTCTGTGTTTGTAAATTTAATGCTGCTACAAGATGTTTCTGTTT
CTTAGATTCTGACCATGACTCATAAGCTTCTTGTCTTCTTCTATTGCTTGTGTTGTGGTCACAGATGCACAACACT
CCTCCAGTCTTGTGGGGGCGAGCTTTTGGGAAGTCTCAGCAGCTCTTCTGGCTGTGTTGTGTCAGCACTGTAACCTCG
CAGAAAAGAGTCGGATTACCAAAACACTGCCTGCTCTCAGACTTAAAGCACTGATAGGACTTAAATAGTCTCA
TTCAAATACTGTATTTTATATAGGCATTTACAAAAACAGCAAAATTGTGGCATTTTGTGAGGCCAAGGCTTGGA
TGCCTGTGTAATAGAGCCTTGTGGTGTGTGCGCACACCCAGAGGGAGAGTTTGAAAAATGCTTATTGGACACG
TAACCTGGCTCTAATTTGGGCTGTTTTTCAGATACACTGTGATAAGTTCTTTTACAAATATCTATAGACATGGTA
AACTTTTGGTTTTTTCAGATATGCTTAATGATAGTCTTACTAAATGCAGAAATAAGAATAAACTTTCTCAAATTATT
AAAAATGCCTACACAGTAAGTGTGAATTGCTGCAACAGGTTTGTCTCAGGAGGGTAAGAATCCAGGTCTAAAC
AGCTGACCCAGTGATGGGGAATTTATCCTTGACCAATTTATCCTTGACCAATAACCTAATTGTCTATTCTGAGT
TATAAAAGTCCCCATCCTTATTAGCTCTACTGGAATTTTCATACACGTAAATGCAGAAAGTTACTAAGTATTAAGT
ATTACTGAGTATTAAGTAGTAATCTGTCAGTTATTAATAATTTGTAATAATCTATTTATGAAAGGTCATTAAACCAG
ATCATGTTCTTTTTTTTGTAAATCAAGGTGACTAAGAAAATCAGTTGTGTAAATAAAATCATGTATC

WO 2004/030615

PCT/US2003/028547

3169/6881
FIGURE 2922

GATGAGAGCATTACCTCCAGCTGCAGAAGAAACACAGGGACAAGATGCTGCGCATGCAGAAAGGTGACCCACAA
GTCTATGAAGAACTTTTCAGTTACTTCTGCCCCAAGTTCCTGTCGCCTGTAGTGCCCAACTATGATAATGTGCAC
CCCAACTACCACAAAGAGCCCTTCCTGCAGCAGCTGAAGGTGTTTTCTGATGAAGTACAGCAGCAGGCCCAGCTT
TCAACCATCCACAGCTTCCTCAAGCTCTACACCACCATGCCTGTGGCCAAGCTGGCTGGCTTCCTGGACCTCACA
GAGCAGGAGTTCAGGATCCAGCTTCTTGTCTTCAAACACAAGATGAAGAACCTGGTGTGGACCAGCGGCATCTCA
ATCCTGGATGGTGAATTTTCAGTCAGCCTCAGAGGTTGACTTCTACATTGATAAGCTTAATCGAACCCCTGAAGAAG
ATGGGACAGAGACCCTGATGACATTCACACACATTATTTAGGAACCTGTTTTGATATATTACAGGCAGGAAGTGT
TTTTGCTACCGTGAAACCTTTACCTAGATCAGCCATCAGCCTGTCTACTCAGTTAACAAGTTAAGGACCGACGTG
TTTCAAGTGATATCAGTAAAGGATCTTTGGAGCC

WO 2004/030615

PCT/US2003/028547

3170/6881
FIGURE 2923

ATGAAGGAAGACTGTCTGCCGAGTTCTCACGTGCCCATCAGTGACAGCAAGTCCATTTCAGAAGTCGGAGCTCTTA
GGCCTGCTGAAAACCTACAACCTGCTACCATGAGGGCAAGAGCTTCCAGCTGAGACACCGTGAGGAAGAAGGGACT
CTGATCATCGAGGGGCTCCTCAACATTGCCTGGGGGCTGAGGCGGCCCATCCGGCTGCAGATGCAGGATGACCGG
GAGCAGGTGCACCTCCCCCTCCACCTCATGGATGCCAGACGGCCTAGCTGCCCTCTAAAGGAGCCATCGCCCCAG
AACGGGAACATCACAGCCAAGGGGCCAAGCATTAGCCAGTGACACAAGGCTGAGAGTTCCACAGACAGCTCGGGG
CCCCTGAGGAGGCAGAGGAGGCCCCCAGCTGATGCGGACCAAGAGCGACGCCAGTTGCATGAGCCAGAGGAGG
CCCAAGTGCCGCGCCCCCGGTGAGGCCCAGCGCATCCGGCGACACCGGTTCTCTATCAACGGCCACTTCTACAAT
CATAAGACCTCCGTGTTTTACTCCAGCCTATGGATCCGTGACCAATGTGAGGGTCAACAGCACCATGACAACCCTG
CAGGTGCTCACCTGCTGCTGAACAAATTTAGGGTGGAAGATGGCCCCAGTGAGTTCGCACTCTACATCGTTTAC
GAGTCTGGGGAGCGGACAAAATTTAAAGACTGCGAGTACCCGCTGATTTCCAGAATCCTGCATGGGCCATGTGAG
AAGATCGCCAGGATCTTCCTGATGGAAGCTGACTTGGGCGTGGAAGTCCCCCATGAAGTCGCTCAGTACATTAAG
TTTGAAATGCCGGTGCTGGACAGTTTTGTTGAAAAATTTAAAGAAGAGGAAGAAAGAGAAATAATCAAACCTGACC
ATGAAGTTCCAAGCCCTGCGTCTGACGATGCTGCAGCGCCTGGAGCAGCTGGTGGAGGCCAAGTAA

WO 2004/030615

PCT/US2003/028547

3171/6881
FIGURE 2924

MKEDCLPSSHVPISDSKSIQKSELLGLLKTYNCYHEGKSFQLRHREEEGTLIEGLLNIAWGLRRPIRLQMQDDR
EQVHLPSTSWMPRRPSCPLKEPSPQNGNITAKGPSIQPVHKAESSTDSSGPLEEAEEAPQLMRTKSDASCMSQRR
PKCRAPGEAQRIRRHRSINGHFYNHKTSVFTPAYGSVTNVRVNSTMTTLQVLTLLLKNKFRVEDGPSEFALYIVH
ESGERTKLDCEYPLISRI LHGPCEKIARIFLMEADLGVEVPHEVAQYIKFEMPVLDSFVEKLKEEEEREI IKLT
MKFQALRLTMLQRLEQLVEAK

WO 2004/030615

PCT/US2003/028547

3172/6881
FIGURE 2925

CACACTGCTCAGGGAAGAGCCTGCTACGGTGGACTGTGAGACTCAGTGCACTGTCTCTCTCCAGCGACCCACG
CTGGACCCCTGCGGACCCTCCACCCTTCGGCCCCCAAGCTTCCCAGGGGCTTCCTTTGGACTGGACTGTCCCT
GCTCATCCATTCTCTGCCACCCCCAGACCTCCTCAGCTCCAGGTTGCCACCTCCTCTCGCCAGAGTGATGAGGT
CCCGGCTTCTGCTCTCCGTGGCCCATCTGCCACAATTCTGGGAGACCACGGAGGAGATGCTGCTTGGGGGTCTTG
GACAGGAGCCCCACCCTCTCCTAGCCTGGATGACTACGTGAGGTCTATATCTCGACTGGCACAGCCCCACCTCTG
TGCTGGACAAGGCCACGGCCCAGGGCCAACCCAGGCCACCCACAGGCCAGCCCAGGCCTGCCGGAAGGGCCGCC
CTGCTGTGTCCCTGCGAGACATCACCGCACGTTTCAGTGGCCAGCAGCCCACACTGCCCATGGCTGATACTGTGG
ACCCCTGGACTGGCTTTTTTGGGGAGTCCCAGGAAAAGCAGCCAAGCCAGAGGGACCTGCCAAGGAGGACTGGCC
CCTCTGCTGGCCTCTGGGGTCCACATAGACAGATGGACAGCAGCAAGCCCATGGGGGCCCCCAGAGGGAGGCTCT
GTGAAGCCAGGATGCCTGGGCATTCCCTGGCAAGACCACCGCAGGATGGGCAGCAGAGCTCTGACCTAAGAAGCT
GGACTTTTGGGCAGTCTGCCAAGCCATGGCCTCCCGCCACCGCCCCCGCCCCAGCAGTGTCTCAGAACACTCT
ACTCGCACTCCCGGTGATCCATGAACCTCTGACCCCTCCCCAGTAAAGGCTTCTGTAGAGAGCATGCTGGGTCTG
CATCTCTCTCGTCTCTCCATGGTGGTCACTGCCCCTGGCAGGTCTCTGAAAGGGAAATGCTTTTCTGCAGAGG
CCCCTGCTTGGGCAGTTCACAGTGAGACCGACCCCTCTGAATATGATAACAGCCTGTTTCACATGAGGAGATGT
TACCAATCCCGTTCGCTCTGACCCTTGCTGGCTGATCACCTTGAGCAACTTACTTAACATCTGTGTTCCTCAGTT
TCTCATGGGTAATATAGGGATAATTACTGGCACCTGCCTCCCAGGCCATTCTGACGTGTAACCGCATATAGGAGC
CCACTGGCTGAGTAGCTACCATCATCGCTGGTGGGGAAACTGGTGGTAGGGGTGTGAGGGTAGTGGGGGTGTGAG
CCCCCAGGTGTTTTCAGAACAAAGGCCTCGGGCACTCCCAAGTCTGCCTCTTGGCTCCCACCCTCAAAGCCCATGT
TCTGTGAGGCCCAAGAGAACACATGGAGTCTTAGCAAATGCACTAATGTATTCCGGGGGACTGTCACCTGGCACC
ACTGGGGCACTCTGCTGGCTACAACCTACATACGTCTGTGGTGGCATTGGGAGAGTTCCCCCATGATGAGGGCCAA
GATAGAATCTGTACCACTCAGTGCTACCATCCCCACCCCTACACCACTTCCACACAGGGGCCTCATGGCATGGTC
AGGGTCCCAGCTGTGGGTGAGAGCAGGGCACTGTCCAGCTGTCCACTGGGGAAGTCAAGATGTCCTAAGGCCCAG
GTCAGGGCATCTGGAGTCTGAAGGACCCTAGTTCTTAGAGGCATCTGGCAGCAAGAAGGTGAGGCATCAGGGAAC
GGGAATCAGGCTGGGACTGATCAGAGGTGAAGGGACAGAGAGAGGAGAGGAAGATTGAGCTGGGGGCAACAG
CCAAGCTCACTGGGCAGGTCTCTGCCACCTCCTTGCTCTGTGAGCTGTGAGTCTAGGTATTCTCTTTTTTTGT
GGCTATTTTTTAATTGCTTTGGATTTGTTAAATGTTTTCTGTCTTCTGTAAAGTGTGTTTTCTCTGGAGATAGAAT
GTAAACCATATTAAAAGGAAAAAGTTTCAGACAAGCAATTACCCAGTTTCCTTATCTATAAAATGGGGACATCAG
CAATGTTCTTCACACCCTGCAAGGGCTGGGAATCTGCGCATGTGAACCTGGAGCTGCATTTATGAGCACTGTAGA
CAAATGTTTGTATCTGTAC

WO 2004/030615

PCT/US2003/028547

3173/6881
FIGURE 2926

GTCGTGGAAGCAGGACTGCGCCGCGTCTTCCTCAAGGTGGGGTTCGGGGGGCCACCGAATCGCTGTCACGCCGGC
AGGTTGAGAACAAAAACATGCACCTGGAGTTTCCCCGGAGCCCTCTGCGTGGTTGAGCTTCGGTGGAATTTCTGGG
GCTCTTGGCTGCCAGCCGCGCTTGCTGGTAGCAACAGAAACCAGTCTGCTCGCTCCGTGGACATTTTATTAC
CATCCAGAAGTGCTCTCCCACTGAAGGCATCCGTGGTTGTTTTTAAGCCACAAAAAGCCACACCCAAGATCACCT
GACACCCACCCTGACAAGTGTCATGATGCTGGGCCCTGAGGGAGGTGAAGGCTTTGTGGTCAAGCTCCGTGGCC
TGCCCTGGTCTGCTCTGTTGAGGACGTGCAGAACTTCCTCTCTGACTGCACGATTCATGATGGGGCCGCAGGTG
TCCATTTTCTACTACTAGAGAGGGCAGGCAGAGTGGTGAGGCTTTTGTGAACTTGGATCAGAAGATGATGTAA
AAATGGCCCTGAAAAAAGACAGGGAAAGCATGGGACACCGGTACATTGAGGTGTTCAAGTCCACAGAACCGAGA
TGGATTGGGTGTTGAAGCACAGTGGTCCCAACAGTGCCGACAGCGCCAACGATGGCTTCGTGCGGCTTCGAGGAC
TCCCATTTGGATGCACAAAGGAAGAAATTGTTCACTTCTCTCAGGGTTGGAAATTGTGCCAAACGGGATCACAT
TGCTGTGGACCCCGAAGGCAAGATTACAGGGGAAGCGTTCTGTCAGTTTGCTCGCAGGAGTTAGCTGAGAAGG
CTCTAGGGAAACACAAGGAGAGGATAGGGCACAGGTACATTGAGGTGTTTAAGAGCAGCCAGGAGGAAGTTAGGT
CATACTCAGATCCCCCTCTGAAGTTCATGTCCGTGCAGCGGCCAGGGCCCTATGACCGGGCCGGGACTGCCAGGA
GGTACATTGGCATCGTGAAGCAGGCAGGCCTGGAAGGATGAGGCCTGGTGCCCTACAGCACAGGCTACGGGGGCT
ACGAGGAGTACAGTGGCCTCAGTGATGGCTACGGCTTACCACCGACCTGTTCCGGGAGAGACCTCAGCTACTGTC
TCTCCGAATGTATGACCACAGATACGGCGACAGTGAGTTCACAGTGCAGAGCACCACAGGCCACTGTGTCCACA
TGAGGGGCTGCCGTACAAAGCGACCGAGAACGACATTTACAACCTTCTCTCTCTCAACCCTGTGAGAGTCC
ATATTGAGATTGGCCAGATGGAAGAGTGACGGGTGAAGCAGATGTTGAGTTTGCTACTCATGAAGAAGCTGTGG
CAGCTATGTCAAAGACAGGGCCAATATGCAGCACAGATATATAGAATCTTCTTGAATTCAACAACAGGGGCCA
GCAATGGGGCGTATAGCAGCCAGGTGATGCAAGGCATGGGGGTGTCTGCTGCCCAGGCCACTTACAGTGGCCTGG
AGAGCCAGTCAGTGAGTGGCTGTTACGGGGCCGGCTACAGTGGGCAGAACAGCATGGGTGGCTATGACTAGTTTT
GTTAGGAACATTTGAGTTACTTCAATCATTTTTCACAGGCAGCCAACAAGCAATTAAGAGCAGTTATAATAGAGGA
AGCTGGGGGACCCATTTTGCACCATGAGTTTGTGAAAAATCTGGATTAAAAAATTACCTCTTCAGTGTTTTCTCA
TGCAAAATTTTCTTCTAGCATGTGATAATGAGTAACTAAACTATTTTCAGCTTTTCTCAATTAACATTTTGGT
AGTATACTTCAGAGTGATGTTATCTAAGTTTAAGTAGTTTAAGTATGTTAAATGTGGATCTTTTACACCACATCA
CAGTGAACACACTGGGGAGACGTGCTTTTTTGGAAAACTCAAAGGTGCTAGCTCCCTGATTCAAAGAAATATTTT
TCATGTTTGTTCATTCTAGTTTATATTTTCAATTAATAATCCTTTAGGTTAAGTTTAAGCTTTTAAAAAGTTAGTT
TTGAGAATTGAGACACAATACTAATACTGTAGGAATTGGTGAGGCCTTGACTTAAACTTTCTTTGTACTGTGAT
TTCTTTTGGGTGTATTTTGTAAAGTAACTTGTAAATTTTTTGTAACTAAATTTTTTCTTAAAAATAAAGA
CTTTTTCACAATGACTGGCACAGATTACTCAGCAAAAGATAGCAAAACGGGTGGTTGAAGATAATTCATTTTAAT
CGTAATGTATTTTAGTGTGAATTTAAAAATTTTATACATCAAATCTATGATCTCCCTTATATTCTTATGATGAGG
CTAAATAAAAGTCTAATAAAAAATGTTAAATATGTGAATGGTGAAATGGTGACTAGCAGCACACATTCTGGGAAG
CATCAAATAGACACACGGCCCCAGCCACCTGCAACTTATGTGCACTGTTGTAAACCATTGAGAATTTTCTGCTA
GGCCCTTGATGCTGGAGTCACATCTGTTGATAGCTGGAGAACCTTAGTTTCAAGTACTACATTGTGAAAGCAATT
ATTTTGTCTTAGTTTTTATAAAATGCTGATTTAACTTTT

WO 2004/030615

PCT/US2003/028547

3174/6881
FIGURE 2927

CGTGTGCACCCTAGCGTCAGCCTCGAGTTTGACCAGCAGCAGGGGTCGGTGTGTCCCTCTGAATCTGAGATCTAT
GAGGCAGGAGCTGAGGACAGGATGGCAGGAGCGCCCATGGCTGCTGCTGTACAGCCTGCTGAGGTGACTGTTGAA
GTTGGTGAGGACCTCCACATGCACCACGTTCTGTGACCGGGAGATGCCTGAAGCTTTGGAGTTTAACCTTTCTGCC
AATCCAGAGGCAAGCACAATATTCCAGAGGAACTCTCAAACAGATGCTTTGGAGTTTAACCTTTCTGCCAATCCA
GAGGCAAAACAATATTCCAGAGGAACTCTCAAACAGATGGTGAGACGACATTGTTTTTCCGCCAAGAGAAAGA
ATAAAATCTCTTGTTTGATCAGGTT

WO 2004/030615

PCT/US2003/028547

3175/6881
FIGURE 2928

MGNILTCRVHPSVSLEFDQQQGSVCPSESEIYEAGAEDRMAGAPMAAAVQPAEVTVEVGEDLHMHVVRDREMPEA
LEFNLSANPEASTIFQRNSQTDALFNPSANPEANTIFQRNSQTDGETTLFFPPRERIKSLV

WO 2004/030615

PCT/US2003/028547

3176/6881
FIGURE 2929

GAATTTCCGTTTTCCGGCGGTGTCCAAGCGGACCTAAGGAGTCGCAGTTGTGAACAGGTTAGAGTTACTTGTTATT
GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACAGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACGAAGAAAATGCCCAGAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTCACAGGACTCTGGATTTGAAGACACAAAAGCATCATATTC
CAGTGGTTGATGGAATCCACTAGAGCCGCCACCAATAGCGGTAGTGGTGACGGGGCCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTGGAACCTCACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTAAAGT
AGCAGATCTGGTAAGTGAGCAGGGGCAGCCTGGGGTGCTGATGGAGACTTACAGCATTGTGATAGGTTATTTACC
CCGTGATGAAGGGAAGAGAGTTTTGTGATTATTAAAAGGATCATGGTCATTATCAGGGATATAGTAGATGTGATT
GAATTGATGATGATAATAATAATAGTAATAAATGTTGTCATATTAATAATACAAATGGAATGTGCACAATGAAAT
GTGTTCCAAAATCTAAAAGCAGATCACAGGA

WO 2004/030615

PCT/US2003/028547

3177/6881
FIGURE 2930

ATGGCATTCAAGACCCTTTGTGGTGAGGTAGATGAGCGTCAGGAAGGATCATCCTCCTCATCCGCAGATCCAACA
GCCGGTAACATTCCGGCCTACAGCACGTCCCTACCTCAGCTGAACCGCTGGGACCAACACGCCGTACCGCAGCCG
CGCACGCCCAGCACGCCACTCCCGGCCTGCCCGGGGCCTGACGTCATCACATCGCGACGCTCGCTGATCCCGCCC
GGATTACCTGGGCTCTGGACGAGAAGCGCCTCGTCCCTTAGCCACACCCCCGGGGAGCCAGGGGCATCTGGCAT
CCGGCAAGTGGCAGCTCCCTCATCATCCTGTCTGATCCAAATTCAACCCACATTACGCCAGCTCTGAAGGTACGG
CTGGCTGTATGTGGCAAACAGAGCAGCCACGACCACAACTGCCGGGACTTCACAATTGGCTTTGTAGTTTGTCT
GAGGGACTGTCCAGGTTTGGAGAAGTCCTAGCCTATCACAGGGATACCTGGTTTGAAGTGTGACCTCATATCTT
TACCGTGACCTCGGTGGGCCAGAGATGCAGGCAGCTGGCCATGAAGACGCACTTCCCCGAGGAAGAGGAGACAGG
CTCACCCGCTGCAGGGCAGTCCCACAGCCTGCCTGCAATGGAGCCTTCAAGAATACAAACACTTCTAGAACAAGT
TATCAGGAACATGGCATGGTTGGGCCTTCTCTGAACGGGCCCCAGGGTAAGCCATCTGATAAGGGAGAAACATCT
GCCAACACCCTCAGCCACAGCGTCACTGGGCTCAAGGGCCACAAAGGAGGCAAAAGCCTGCAGGGAAAAGAAATC
CAAGACAGTAAAACAGAAGAACGAGTATTTGCCTGTAAGTATCTGTGTGAGAGGTTCTCTGGTGAGGTGCCAGAG
CACCCAGGACCAGCACACAAGACACAGTCATACACTGAGATGGAGGACAAGGTTCCCTACAGGGACGAAGATGAG
ACAACAGAGCGACAAACACAGGAAAGTGACTTCAGGCATCCATTAGGAGGGACAAGCAGTAGCCCTACTTATGGG
TGGCAAGATGTCACCTTCATTCTGGCAAAGCTGATTGAAGAATGCAGCATTAGATGTGCAGCTATACAGACCTGC
CAGATCAACAAGCCCTCGGGCAATGCCTATGATGCTGCTTCACTGGCTGCACAGTCACAGGGACCTCCCCAGAAC
TGCTGTGCAAAGGGTCAACTTCCCAGACCCCCAGAGGCCAATGTCTTCATGGTGCTCCTGGTGAGGCCACCAGCT
GCTCCCAGCCCGGCTGCCACACAGAGAGTACGGCAGCCTCACACTGCTGGTTATCCCAGAGGCTTGGAGCAGGGT
TGGAGGGATGAAGCAGGCCTGGACTGCGTCCCTTAGGAAGACAGAAGCCATCGTCGATATGGCCGTTCCCTTGCTC
CCTCCCTCCTGCTCCTACAGCAAGCATAACAGGGCTGACTCCTCTCCACACCGCAGCATGGAGAATTAGAGGGC
AATAATAGCAACTGCTTGCTTGTAAGTGCTTGGAGCTCAGAGGAGAAAAGGTGTCAGACAAGTGTAATGTTA
CTACTGGCACAGGCCAGAGGATGGAATGGAAAATCCCAGCAGAAATTGGGAATCAGAGGAAGCCATTTGTCAGC
TCCTCTGAACAAATGGATACAGGAAAAGGGGCCTTCTCTGGCAGCCAGGCACAGCCCAGACCACTGCTGCCAC
AGCCCTCACCAAGAGAGGAACATAGAGGGGAAGCGGGGAGGGGAGGAGGAGGCTAGTAATATAGCTCATAGTCAG
ACTCAGACCAATCTGCTGGTCTTGACAAAGGAGTTTTGTGAGCAGAGAACTCATGCTGCTCTCCTTGGGCACATG
GAAATTGGAATCCTAAGGAGTCCCTCACAAAGCCCCAGAGAAATCTGGCCATTCTCCAGGGGACCGAGCATCCCC
ATGGTGCTGCTAGGGAGTCCCCAGAAGCTACCAACCCCCAACAGCTTTGGACACCCCTGCTCTTATTTTCTGCA
TCCCAGAACTACCTGCCCTAGTGCTGAGCTCATGGAAGTTCTCAGGAAGCATCTTCACATGGATGTTGAAGAG
AAAAAATCTCCAGGTCCCACGGGGTGCTGTGGGAGTCCAAAATCAGGACTCCAAAAGGCCTGTGA

WO 2004/030615

PCT/US2003/028547

3178/6881
FIGURE 2931

AGTGCTCTTGGCCGGGAGGAGGCTGTGCTGCACCAGCACCTCTTGCTCCACATCTCCAGAGAGCCCAGGGCCCTG
TGGCCGAGTGTGTCCAGCCAGTGTGTCATGGGGAGCTTCCATATCTCATGGCTCCTTGCTGGGCCAAGCCCTCCAG
AACCCCAAACCCCAAAGACTGATGAATGCCAGAGTGGCCACCTTGCTTATCTGTGGCCCCGGCCCTGGTGATCA
CCATGGCAGCTGGGAAGGGAGCCCCGTTGAGCCCATCGGCTGAAAACAGATGGCGACTTAGCGAACCTGAGCTGG
GCCGGGGCTGCAAGCCAGTGTGCTCGAGAAGACGAACCGCTGGGCCCTGAGGCTGCTGTGGGCAGGGCGGGCC
GGGATGTGGGCAGTGCAGGAGCTGGCACTGTTGGTAGCCCCAGGCAAGCCCCGACCTGGCAAGCCGCTGCCCCGA
AGACACGTGGAGAGCAGAGGCAGAGCGCCTTCACGGAGCTGCCGAGGATGAAGGACCGGCAGGTGGATGCTCAGG
CCCAGGAGAGGGAGCAGATGACCCACAGGCCAACCTGGTGCCCCACAGCTGACCCAGAACATCCCCAGAGGCC
CAGCTGGCAGCAAAGTCTTCTGTGTGGCCAGCGGAGCACGAAGTGAGCAAAGAAGCGCCTTTAGCAAACCAA
CCAAGCGACCAGCAGAGAGGCCGTAGCTAACCTCAGTCTTCCCTGCAGGGGAATCTGCAGATGCCCTGGGGGAGC
TGTCTGGACTCCTCAACACTACAGACCTCGCTTGTGGGGTCGACTTCAACTCCCAAGCTTTTGGTTGGTGATT
TGTGGAACCTTGCAAGCATTGCCACAGAATGCTCCACTCTGTAGCACTTTTCTGGGTGCCCTTACACTGTGGCTGG
AGCATAACCCAGGCCAGGTGCCCCACCCTCATCATCTCCACCCTTCGTGGGGCCCTCCTGCCACCCACCCTCA
CCTCCCTGGGCTTGTCCACCCAGAACTGGTGTGCAAAGTGCAACCTGTCTTTTCGCTTAACGTCCGACCTGGTCT
TTCACATGCGATCCCACCACAAAAAGGAGCATGCGGGGCCTGACCCACATTCTCAGAAGCGGAGAGAAGAGGCC
TTGCCTGCCCTGTGTGCCAGGAGCACTTCCGGGAGCGCCACCACCTCTCCCGGCACATGACTTCTCACAGCTAGC
AGGTGACCGCAGAATGACCTGCTGGGTGCAGCAGCCAGCCTTTGGCAGAGGGGGCTCCCTGGGCCTGCGTTGAG
GGGGCTGTGATGGTCCTTTGCAGAGCTGCTGCTTTTGGCATTTCATAGATAAACAGCTCAGGCATAATTTGAAAAA
GCCACACCTGCATGATGTGTTTTGAAGGAAATGAAGTCCTGAAATAAAGTGATGGGCTTTGCAAATCCAGGGTAG
AGGCCCTAACAGGCACAGAGAGCAGGGGCAACTCCTGGCACACATCATGGGCTTTGGAGGCACACAAGCCTGGAT
TCGAATCTGGGCTCTTTACATACTAGCTGTGACCTGGACAAAGAGCTTTAACCTGCTGAGTCCCCATTTTCTC
ATCTGTGAAATGGAGATGATAACACTGTGTCTTAGGTTGGCATTACAGGTCACATGAAAGGTGTGTGGAAAGTGGC
CAGCATTCTGCCTGCAGACCTGAGCACTGAGTCAACAAGGTTTGTGATGATGTCTGTACTAGTTAGCTATTGTT
ATTAACAAGATCTCCATGGCAGACAAGCTAAAGCATCTGCCTAAGTCGTGAGTCTGTGGGTTGGCTCAGGTTAAG
CTGAGCAGGTGGGGATCTCAGCCAGCCTCCCAGACTGCACCTCTTCTATTGCTCTCCTCTGTCCACCGTCCAGG
CAGCAGCACTCCCACCTGGCTGCTCTGATGTCTCGCTCCCTCCATTCTGCCTCTCACCATGCACGCATCCATT
GTCCACACACACACAACCAGATAATCTTCTGAAAGTGTAACCTCAGATGATGCCTCCAACCCTGTGGCTGCCCTC
ACACTTACAGGCCTAACCCAGCAGGACCTGCCAGCTGCTTCATGAACAAGTCCCTGCCTCATGTTAATTGCAAG
CACTCATTTTCACTCTCCCTGTGTGCCAGGCAATAGCATAAGCACTGGAAGAATACAGATGTTATAGTGAGTCCTA
CAATAGCCCTGGAAGGCAAGAGCTGTTTCTTTCCATTTCTACAATGAGTCAATTGCAGATGATGCTATAACACT
TCCAGTGTTTCTGACACTTCCCTGAAGCTATACCTGCTACCTTCATGGGCCGAGCTTGCCCTTATGAGGCCCCA
GGTGGCAGTGGGCAGAGGGGACCCCGCTATACCACCTCGCTGCTGTTCCACTGTCTGCTCCCGTGTCTGACCAC
AGCTCTGGTGCCGTTTCTCAAGCCTGGGCTTCATTCAACATTTTCTATCTAGCTCTTCATGGTGCTGCTCCTGCT
ATGGTTCCACAGGGCTTCTTCTCGCAGGTGAGCTCCTTAGAGAGGTCTCCAGATTCCCCGTAAAGCAGCCCTGC
AGCCTCTGCCTCTCTCAGCCGCATCACCCTGTTGCTTCTTCACAGCATGTCTCACCATCTGCAACCATCTTTCT
GTTTGTGCTCTTGTGATTTGCTGCCTCCACACTGTGAGCTCCTTGGGAACAGAGATTGGTTTGTCTTACTGTGCA
TCCCTGGTGCCAGAACAGGGCATGGCATATTGTTGGTGCATAATAAATATTGTGGAAAT

WO 2004/030615

PCT/US2003/028547

3179/6881
FIGURE 2932

MP EWPPCLSVAPALVITMAAGKGAPLSPSAENRWRLSEPELGRGCKPVLL EKTNRLGPEAAVGRAGRDVGS AELA
LLVAPGKPRPGKPLPPKTRGEQRQSAFTELPRMKDRQVDAQA QEREHDDPTGQPGAPQLTQNI PRGPAGSKVFSV
WPSGARSEQRS AF SKPTKRPAERPELTSVFPAGESADALGELSGLLNTTDLACWGR LSTPKLLVGD LWNLQALPQ
NAPLCSTFLGAPT LWLEHTQAQVPPSSSSTTSWALLPPTLSLGLSTQNWCAKCNLSFRLTSDLVFHMRS HHKK
EHAGPDPHSQKRREEALACPVCQEHFRERHHLSRHMTSHS

WO 2004/030615

PCT/US2003/028547

3180/6881
FIGURE 2933

GGCCTGCTCACTCCTCAGCTGCAGGAGCCAGACGTGTGGAGTCCCAGCAGAGGCCAACCTGTGTCTCTTTCATCTC
CCTGGGAAAGGTGCCCCGAGGTGAAAGAGATGGCCTGGTGGAAATCCTGGATTGAACAGGAGGGTGTACAGTG
AAGAGCAGCTCCCACTTCAACCCAGACCCTGATGCAGAGACCCTCTACAAAGCCATGAAGGGGATCGGGACCAAC
GAGCAGGCTATCATCGATGTGCTCACCAAGAGAAGCAACACGCAGCGGCAGCAGATCGCCAAGTCCTTCAAGGCT
CAGTTCGGCAAGGACCTCACTGAGACCTTGAAGTCTGAGCTCAGTGGCAAGTTTGAGAGGCTCATTGTGGCCCTT
ATGTACCCGCCATACAGATACGAAGCCAAGGAGCTGCATGACGCCATGAAGGGCTTAGGAACCAAGGAGGGTGTG
ATCATTGAGATCCTGGCCTCTCGGACCAAGAACCAGCTGCGGGAGATAATGAAGGCGTATGAGGAAGACTATGGG
TCCAGCCTGGAGGAGGACATCCAAGCAGACACAAGTGGCTACCTGGAGAGGATCCTGGTGTGCCCTCTGCAGGGC
AGCAGGGATGATGTGAGCAGCTTTGTGGACCCAGGACTGGCCCTCCAAGACGCACAGGATCTGTATGCGGCAGGC
GAGAAGATTCTGTTGGGACTGATGAGATGAAATTCATCACCATCCTGTGCACGCGCAGTGCCACTCACCTGCTGAGA
GTGTTTGAAGAGTATGAGAAAATTGCCAACAAGAGCATTGAGGACAGCATCAAGAGTGAGACCCATGGCTCACTG
GAGGAGGCCATGCTCACTGTGGTGAAATGCACCCAAAACCTCCACAGCTACTTTGCAGAGAGACTCTACTATGCC
ATGAAGGGAGCAGGGACGCGTGATGGGACCCTGATAAGAAACATCGTTTCAAGGAGCGAGATTGACTTAAATCTT
ATCAAATGTCACTTCAAGAAGATGTACGGCAAGACCCTCAGCAGCATGATCATGGAAGACACCAGCGGTGACTAC
AAGAACGCCCTGCTGAGCCTGGTGGGCAGCGACCCCTGAGGCACAGAAGAACAAGAGCAAAGACCATGAAGCCAG
AGTCTCCAGGACTCCTCACTCAACCTCGGCCATGGACGCAGGTTGGGTGTGAGGGGGGTCCCAGCCTTTCGGTCT
TCTATTTCCCTATTTCCAGTGCTTTCCAGCCGGGTTTCTGACCCAGAGGGTGGAACCGGCCTGGACTCCTCTTCC
CAACTTCCTCCAGGTCATTTCCCAAGTGTGAGCACAATGCCAACCTTAGTGTTTCTCCAGCCAGACAGATGCCTCA
GCATGAAGGGCTTGGGGACTTGTGGATCATTCCTTCTCCTGCCCTGCAGGAGCTTCCCAAGCTGGTCACAGAGTCTCC
TGGGCACAGGTTATACAGACCCCAGCCCCATTCCCATCTACTGAAACAGGGTCTCCACAAGAGGGGGCCAGGGAAAT
ATGGGTTTTTAAACAAGCGTCTTACAAAACACTTCTCTATCATGCAGCCGGAGAGCTGGCTGGGAGCCCTTTTGT
TTAGAACACACATCCTTCAGCAGCTGAGAAACGAACACGAATCCATCCCAACCGAGATGCCATTAACATTCATCT
AAAAATGTTAGGCTCTAAATGGACGAAAAATTCTCTCGCCATCTTAATAACAAAATAAACTACAAATTCCTGACC
CAAGGACACTGTGTTATAAGAGGCGTGGGCTCCCTGGTGGCTGACCAGGTCAGCTGCCCTGGCCTTGACCCCT
CTGCATGCAGCACAGAAGGGTGTGACCATGCCCTCAGCACCCTCTTGTCCCACTGAACGGCAACTGAGACTGG
GTACCTGGAGATTCTGAAGTGCCTTTGCTGTGGTTTTCAAATAATAAAGATTGTATTCAACTC

WO 2004/030615

PCT/US2003/028547

3181/6881
FIGURE 2934

GAATTTCCGTTTCCGGCGGTGTCCAAGCGGACCTAAGGAGTCGCAGTTGTGAACAGGTTAGAGTTACTTGTTATT
GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACGGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACTAAGAAAATGCCAGAAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTACAGGACTCTGGATTTGAAGACACAAAAGCATCATATTC
CAGTGGTTGATGGAACCTCCACTAGAGCCGCCACCAATACCGGTAGTGGTGACGGGGCCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTTCGGAACCTTACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTAAAGT
AGCAGATCTGGTACTGATGCTTATAGATGCCAGCTTTGGGTTTGAAATGGAAATGTTTGAGTTTCTAAACATCTG
TCAAGCACATGGCTTTTCTAAATTTCTGGGAGTTCTCACCCACCTCGACTCCTTCAAGCATAACAAGCAACTGAA
GAAGACAAAGAAGCGATTAAACACAGGTTCTGGACAGAAGTTTACCAGGTTGCCAAACTGTTCTACCTTTCTGG
AATGGTGCATGGAGAATATCAAAACCAAGAAATCCACAATCTGGGCCATTTTATTACAGTTATGAAGTTTAGGCC
TCTCATGGCAAACTTTTACCCTTATATCCTGGCAGACAGGATGGAAGATTTGACAAACCCGGAGGATATCCAAA
CAAACATCAAATGTGACCGGCAGGTGTCACCTTTATGGTTATTTAAGAGGAGCACACTTCAAAGATAAAAGCCAAA
TTCACATGCCAGGACAAGGTGGGGCTCACCCATGAGCTGGTCCAGAGTCTCATCTCCACCTACTCCACCATTGAT
GCCAAGATGGCTTCAAGTCGAGTGACGCTGCTTTCCAATTCAAACCCTTGGGTCAGAGGCTATAGATAATCAA
GGGTAAGTCTGCTTTTTTTTCTATTTTTTAATAAAAAGATATATTACAGAA

WO 2004/030615

PCT/US2003/028547

3182/6881
FIGURE 2935

CGGGGGCGAGGGGGCGGCAGGCAGGTGTAGCGCTGCCCTGGGCGGGCTTGACCCCCACACCCAAGTGAGCGGCC
TGCTCACTCCTCAGCTGCAGGAGCCAGACGTGTGGAGTCCCAGCAGAGGCCAACCTGTGTCTCTTCATCTCCGTG
AGAAAGGTGCCCCGAAGTGAAAGAGATGGCCTGGTGAAAGCCTGGATTGAACAGGAGGGTGTACAGTGAAGA
GCAGCTCCCACTTCAACCCAGACCCCTGATGCAGAGACCCCTCTACAAAGCCATGAAGGGGATCGGTGTGCGGTCCC
AACTGCTCAGCCACCAAGCAGCTGCCTTCGCCTTCCCCTCCTCCGCCCTCACCAGTGTGTACCCCTGGGGGCAGC
AGGGTCACTTGTGCTGTAACCCTGCAGGGACCAACGAGCAGGCTATCATCGATGTGCTCACCAAGAGAAGCAACA
CGCAGCGGCAGCAGATCGCCAAGTCCTTCAAGGCTCAGTTGCGCAAGGACCTCACTGAGACCTTGAAGTCTGAGC
TCAGTGGCAAGTTTGAGAGGGCTCATTGTGGCCCTTATGTACCCGCCATACAGATACGAAGCCAAGGAGCTGCATG
ACGCCATGAAGGGCTTAGGAACCAAGGAGGGTGTATCATTTGAGATCCTGGCCTCTCGGACCAAGAACCAGCTGC
GGGAGATAATGAAGGCGTATGAGGAAGACTATGGGTCCAGCCTGGAGGAGGACATCCAAGCAGACACAAGTGGCT
ACCTGGAGAGGATCCTGGTGTGCCTCCTGCAGGGCAGCAGGGATGATGTGAGCAGCTTTGTGGACCCGGCACTGG
CCCTCCAAGACGCACAGGATCTGTATGCGGCAGGCGAGAATATTCGTGGGACTGATGAGATGAAATTCATACCA
TCCTGTGCACGCGCAGTGCCACTCACCTGCTGAGAGTGTGTAAGAGTATGAGAAAATTGCCAACAAGAGCATTG
AGGACAGCATCAAGAGTGAGACCCATGGCTCACTGGAGGAGGCCATGCTCACTGTGGTGAAATGCACCCAAAACC
TCCACAGCTACTTTGCAGAGAGACTCTACTATGCCATGAAGGGAGCAGGGACGCGTGATGGGACCCTGATAAGAA
ACATCGTTTCAAGGAGCGAGATTGACTTAAATCTTATCAAATGTCACCTTCAAGAAGATGTACGGCAAGACCCTCA
GCAGCATGATCATGGAAGACACCAGCGGTGACTACAAGAACGCCCTGCTGAGCCTGGTGGGCAGCGACCCCTGAG
GCACAGAAGAACAAGAGCAAAGACCATGAAGCCAGAGTCTCCAGGACTCCTCACTCAACCTCGGCCATGGACGCA
GGTTGGGTGTGAGGGGGGTCCCAGCCTTTCGGTCTTCTATTTCCCTATTTCCAGTGCTTTCCAGCCGGGTTTCTG
ACCCAGAGGGTGGAACCGGCCTGGACTCCTCTTCCCAACTTCTCCAGGTCATTTCCAGTGTGAGCACAATGCC
AACCTTAGTGTTTCTCCAGCCAGACAGATGCCCTCAGCATGAAGGGCTTGGGGACTTGTGGATCATTCTTCTCCTCC
CTGCAGGAGCTTCCCAAGCTGGTCACAGAGTCTCCTGGGCACAGGTTATACAGACCCCAAGCCCATTTCCATCTA
CTGAAACAGGGTCTCCACAAGAGGGGCCAGGGAATATGGGTTTTTAACAAGCGTCTTACAAAACACTTCTCTATC
ATGCAGCCGGAGAGCTGGCTGGGAGCCCTTTTGTGTTTAGAACACACATCCTTCAGCAGCTGAGAAACGAACACGA
ATCCATCCCAACCGAGATGCCATTAACTTCACTTAAAAATGTTAGGCTCTAAATGGACGAAAAATTCTCTCGCC
ATCTTAATAACAAAAATAAATACTACAAATTCCTGACCCAAGGACACTGTGTTATAAGAGGCGTGGGCTCCCCTGGTG
GCTGACCAGGTGAGCTGCCCTGGCCTTGCACCCCTCTGCATGCAGCACAGAAGGGTGTGACCATGCCCTCAGCAC
CACTCTTGTCCCCACTGAACGGCAACTGAGACTGGGTACCTGGAGATTCTGAAGTGCCTTTGCTGTGGTTTTCAA
AATAATAAAGATTTGTATTCAACTC

WO 2004/030615

PCT/US2003/028547

3183/6881
FIGURE 2936

MPKARQSPGARGRQAGVALPWAGLHPHTQVSGLLTPQLQEPDVWSPSRGQPVSLHLPKGKGAPEVKEMAWWKSWE
QEGVTVKSSSHFNPDPAETLYQAMKGIGVGSQLLSHQAAAFAPSSALTSVSPWGQQGHLCCNPAGTNEQAIID
VLTKRSNTQRQQIAKSFKAQFGKDLTETLKSELGKFERLIVALMYPPYRYEAKELHDAMKGLGTKEGVIIIEILA
SRTKNQLREIMKAYEEDYGSSLEEDIQADTSGYLERILVCLLQGSRDDVSSFVDPGLALQDAQDLYAAGEKIRGT
DEMKFITILCTRSATHLLRVFEEYEKIANKSIEDSIKSETHGSLEEAMLTVVKCTQNLHSYFAERLYYAMKGAGT
RDGTLIRNIVSRSEIDLNLIKCHFKKMYGKTLSSMIMEDTSGDYKNALLSLVGSDP

WO 2004/030615

PCT/US2003/028547

3184/6881
FIGURE 2937

GCTAATACTGAAATTGTCAGGTCGGTGTAAGTGTGACAGTCCGGAAGCAATGGAGGCTTCAGTGAGCAGGACCAG
CTGCCCTTTCTCACCACCACAGCTTGATCTCTCTCACAACCTTCCTCTCCACCTCCACTGACCTCTGGGTTGGTTTT
CTCCTGCACGATCTTTCCACGTGTCAGGGGCTGGAGGCACCCTACAAGAGCTGACTTTACATTTCCCTTCCTAGA
GGTAATCCCAGAACAAAAGAGAGCAGTTTTATTTATTTTTTTTCAAGAGAATTAAATTGTTTATTGATTACACATG
ATAATGGATGATACACAAGCTTCATTCCCATCTATAATTTAATCTGGTACCATTATTCAATTAGATATGTTACAT
AGGATGTGCCAACAAATTACTTTTATAACCAATAATTCCATGATTTTGCTTGGGTAATCCCTTTAATGGTGACTG
AAATCATGACTGACCGAGTCAGTGGCTAGAAAAGGGGCTTTGCCTTTGTAACTTTTGATGACCATGACTCCGTCCG
ATAAGATTGTCATTTCAGAAATACCATACTGTGAATGACCACAACCTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAG
AGATGGCTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGTTCTGGAAACTTTGGTGGTGGTTCGTGGAGGTGGTT
TCAGTGGGAATGACAACCTTTGCTATTGGAGGAACTTCAGTGGTCTTGGTGGCTTTGGTGGCAGTCGTGGTGGTG
GTGGATATGGTGGCAGTGGGGATGGCTGTAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGAGCT
ACAATGATTTTGGCAATTACAACAATGAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTGGAGGCAGAA
GCTCTGGCCCCCTGTGGCAATGGAGGCCTATACTTTGCAAACCATGAAACCAAGGTGGCTATTGGCGGTTCCAGC
AGCAGCAGTAGCTATGGCAGTGGCAGATTTTAATTAGGAAACAAAGCTTAGCAGGAGAGGAGAGCCAGAGAAATG
ACAGGGAATCTACAGGTTACGACAGATTTGTGAATCAGCCAAGCACAGTGGTGGCAGGGCCTAGCTGCTACAAA
GAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAACTCGAGGACTGTATTTGTGACTAACTGTATAA
CAGGTTATTTTAGTTTCTGTTCTGTGGGAAGTGTAAGCATTCCAGCTAAGGGTTTTAATATAGGTTTTTTTTTT
GCACCCATGCTGTTGATTGCTAAATGTAATAGTCTGATCATGACGCTGAATAAATGTCTTTTGTTTTAAATGTGCT
GTGTAAAGTTAGTTTACTCTGAAGCTATCTTGGTAAATTTCCCCAACAGTGTGAAGTTAGAATTCCTTCAGGGTG
ATGCCAAGTTCTATTTGGAATTTATATACAACCTGCTTGGGTGGAGAAGCCATTGTCTTCAGAAACCTTTGGTGT
AGTTGAACTGATAGTTACTGTTGTGACCTGAAG

WO 2004/030615

PCT/US2003/028547

3185/6881
FIGURE 2938

MASASSQRGRSGSGNFGGGRGGGFSGNDNFGIGGNFSGLGGFGGSRGGGGYGGSGDGCNGFGNDGSNFGGGGSY
NDFGNYNNESSNFGPMKGGNFGGRSSGPCGNGGLYFAKP

WO 2004/030615

PCT/US2003/028547

3186/6881
FIGURE 2939

GTCTGGGTGGGGCCTGGGAGCCACAGGAGATGCCCAAAGCCAGGCAGAGCCCGGGGGCGAGGGGACGGCAGGCAG
GTGTGGCGCTGCCCTGGGCGGGCTTGACCCCCACACCAAGTGAGCGGCCTGCTCACTCCTCAGCTGCAGGAGC
CAGACGTGTGGAGTCCCAGCAGAGGCCAACCTGTGTCTCTTCATCTCCCTGGGAAAGGTGCCCCGAGGTGAAAG
AGATGGCCTGGTGGAAATCCTGGATTGAACAGGAGGGTGTACAGTGAAGAGCAGCTCCCACTTCAACCCAGACC
CTGATGCAGAGACCCTCTACCAAGCCATGAAGGGGATCGGGACCAACGAGCAGGCTATCATCGATGTGCTCACCA
AGAGAAGCAACACGCAGCGGCAGCAGATCGCCAAGTCCTTCAAGGCTCAGTTCGGCAAGGACCTCACTGAGACCT
TGAAGTCTGAGCTCAGTGGCAAGTTTGAGAGGCTCATTGTGGCCCTTATGTACCCGCCATACAGATACGAAGCCA
AGGAGCTGCATGACGCCATGAAGGGCTTAGGAACCAAGGAGGGTGTGCATCATTGAGATCCTGGCCTCTCGGACCA
AGAACCAGCTGCGGGAGATAATGAAGGCGTATGAGGAAGACTATGGGTCCAGCCTGGAGGAGGACATCCAAGCAG
ACACAAGTGGCTACCTGGAGAGGATCCTGGTGTGCCTCCTGCAGGGCAGCAGGGATGATGTGAGCAGCTTTGTGG
ACCCAGGACTGGCCCTCCAAGACGCACAGGATCTGTATGCGGCAGGCAGGAAGATTTCGTGGGACTGATGAGATGA
AATTCATCACCATCCTGTGCACGCGCAGTGCCACTCACCTGCTGAGAGTGTGTTGAAGAGTATGAGAAAATTGCCA
ACAAGAGCATTGAGGACAGCATCAAGAGTGAGACCCATGGCTCACTGGAGGAGGCCATGCTCACTGTGGTGAAAT
GCACCCAAAACCTCCACAGCTACTTTGCAGAGAGACTCTACTATGCCATGAAGGGAGCAGGGACGCGTGATGGGA
CCCTGATAAGAAACATCGTTTTCAAGGAGCGAGATTGACTTAAATCTTATCAAATGTCACTTCAAGAAGATGTACG
GCAAGACCCTCAGCAGCATGATCATGGAAGACACCAGCGGCGACTACAAGAACGCCCTGCTGAGCCTGGTGGGCA
GCGACCCCTGAGGCACAGAAGAACAAGAGCAAAGACCATGAAGCCAGAGTCTCCAGGACTCCTCACTCAACCTCG
GCCATGGACGCAGGTTGGGTGTGAGGGGGGTCCCAGCCTTTCAGTCTTCTATTTCCCTATTTCCAGTGCTTTCCA
GCCGGGTTTTCTGACCCAGAGGGTGGAACCGGCCTGGACTCCTCTCCCAACTTCCTCCAGGTCATTTCCAGTGT
GAGCACAATGCCAACCTTAGTGTTTTCTCCAGCCAGACAGATGCCTCAGCATGAAGGGCTTGGGGACTTGTGGATC
ATTCTTCTCCTGTCAGGAGCTTCCCAAGCTGGTCACAGAGTCTCCTGGGCACAGGTTATACAGACCCCAAGCCC
CATTCCCATCTACTGAAACAGGGTCTCCACAAGAGGGGCCAGGGAATATGGGTTTTTAACAAGCGTCTTACAAAA
CACTTCTCTATCATGCAGCCGGAGAGCTGGCTGGGAGCCCTTTTGTGTTTAGAACACACATCCTTCAGCAGCTGAG
AAACGAACACGAATCCATCCCAACCGAGATGCCATTAACATTATCTAAAAATGTTAGGCTCTAAATGGACGAAA
AATTCTCTCGCCATCTTAATAACAAAATAAACTACAAATTCCTGACCCAAGGACACTGTGTTATAAGAGGCGTG
GCTCCCTGGTGGCTGACCAGGTCAGCTGCCCTGGCCTTGACCCCTCTGCATGCAGCACAGAAGGGTGTGACCA
TGCCCTCAGCACCCTCTTGTCCCACTGAACGGCAACTGAGACTGGGTACCTGGAGATTCTGAAGTGCCTTTGC
TGTGGTTTTCAAATAATAAAGATTTGTATTTC

WO 2004/030615

PCT/US2003/028547

3187/6881
FIGURE 2940

MAWWKSWIEQEGVTVKSSSHFNPDPAETLYKAMKGIGTNEQAIIDVLTIKRSNTQRQQIAKSFKAQFGKDLTETL
KSELGKFERLIVALMYPPYRYEAKELHDAMKGLGTKEGVIIIEILASRTKNQLREIMKAYEEDYGSSLEEDIQAD
TSGYLERILVCLLQGSRDDVSSFVDPGLALQDAQDLYAAGEKIRGTDEMKFITILCTRSATHLLRVFEEYEKIAN
KSIEDSIKSETHGSLEEAMLTVVKCTQNLHSYFAERLYYAMKGAGTRDGTILRNIVSRSEIDLNLIKCHFCKMYG
KTLSSMIMEDTSGDYKNALLSLVGSDP

WO 2004/030615

PCT/US2003/028547

3188/6881
FIGURE 2941

GAATTTCCGTTTCCGGCGGTGTCCAAGCGGACCTAAGGAGTCGCAGTTGTGAACAGGTTAGAGTTACTTGTATT
GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACGGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACTAAGAAAATGCCAGAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTCACAGGACTCTGGATTGAAGACACAAAAGCATCATATT
CAGTGGTTGATGGAACCTCCACTAGAGCCGCCACCAATACCGGTAGTGGTGACGGGGCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTCCGGAACCTTACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAAACATGATGATTGATCTGGCTAAAGT
AGCAGATCTGGTACTGATGCTTATAGATGCCAGCTTTGGGTTTGAAATGGAAATGTTTGAGTTTCTAAACATCTG
TCAAGCACATGGCTTTTCTAAATTTCTGGGAGTTCTCACCACCTCGACTCCTTCAAGCATAACAAGCAACTGAA
GAAGACAAAGAAGCGATTAAAACACAGGTTCTGGACAGAAGTTTACCAGGTTGCCAAACTGTTCTACCTTTCTGG
AATGGTGCATGGAGAATATCAAAACCAAGAAATCCACAATCTGGGCCATTTTATTACAGTTATGAAGTTTAGGCC
TCTCATGGCAAACTTTTACCCTTATATCCTGGCAGACAGGATGGAAGATTTGACAAACCCGGAGGATATCCAAA
CAAACATCAAATGTGACCGGCAGGTGTCACTTTATGGTTATTTAAGAGGAGCACACTTCAAAGATAAAAGCCAAA
TTCACATGCCAGGACAAGGTGGGGCTCACCATGAGCTGGTCCAGAGTCTCATCTCCACCTACTCCACCATTGAT
GCCAAGATGGCTTCAAGTCGAGTGACGCTGCTTTCCAATTCCAACCCTTGGGTCAGAGGCTATAGATAATCAA
GGGTAAGTCTGCTTTTTTTTCTATTTTAAATAAAAAGATATATTACAGAA

WO 2004/030615

PCT/US2003/028547

3189/6881
FIGURE 2942

CGTGTGCACCCTAGCGTCAGCCTCGAGTTTGACCAGCAACAGGGGTCGGTGTGTCCCTCTGAATCTGAGATCTAT
GAGGCAGTAGCTGGGGACAGGATGGCAGGAGCGCCCATGGCTGCTGCTGTGCAGCCTGCTGAGGTGACTGTTGAA
GTTGGTGAGGACCTCCACATGCACCACGTTTCGTGACCGGGAGATGCCTGAAGCTTTGGAGTTTAACCTTTCTGCC
AATCCAGAGGCAAGCACAATATTCCAGAGGAACTCTCAAACAGATGCTTTGGAGTTTAACCTTCTGCCAATCCA
GAGGCAAGCACAATATTCCAGAGGAACTCTCAAACAGATGGTGAGACGACATTGTTTTTCCGCCAAGAGAAAGA
ATAAAAGCTCTTGTTTTGATCAGGTT

WO 2004/030615

PCT/US2003/028547

3190/6881
FIGURE 2943

MAGAPMAAAVQPAEVTVEVGEDLHMHVDRDREMPEALEFNLSANPEASTIFQRNSQTDALFNPSANPEASTIFQ
RNSQTDGETTLFFPPRERIKALV

WO 2004/030615

PCT/US2003/028547

3191/6881
FIGURE 2944

GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACAGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACGAAGAAAATGCCAGAAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTACAGGACTCTGGATTGAAGACACAAAAGCATCATATTC
CAGTGGTTGATGGAACCTCCACTAGAGCCGCCACCAATACCGGTAGTGGTGACGGGGCCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTTCGGAACCTCACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTGAAGT
AGCAGATCTGGTACTGATGCTTATAGATGCCAGCTTTGGGTTTGAAATGGAAATGTTTGAGTTTCTAAACATCTG
TCAAGCACATGGCTTTCTAAATTTCTGGGAGTTCTCACCACCTCGACTCCTTCAAGCATAACAAGCAACTGAA
GAAGACAAAGAAGCGATTAAAACACAGTTCTGGACAGAAGTTTACCAGGTTGCCAAACTGTTCTACCTTTCTGG
AATGGTGCATGGAGAATATCAAAACCAAGAAATCCACAATCTGGGCCATTTTATTACAGTTATGAAGTTTAGGCC
TCTCATGGCAAACTTTTACCCCTTATATCCTGGCAGACAGGATGGAAGATTTGACAAACCCGGAGGATATCCAAA
CAAACATCAAATGTGACCGGCAGGTGTCACTTTATGGTTATTTAAGAGGAGCACACTTCAAAGATAAAAGCCAAA
TTCACATGCCAGGACAAGGTGGGGCTCACCCTGAGCTGGTCCAGAGTCTCATCTCCACCTACTCCACCATTGAT
GCCAAGATGGCTTCAAGTCGAGTGACGCTGCTTTCCAATTCCAACCCTTGGGTGAGAGGCTATAGATAATCAA
GGGTAAGTCTGCTTTTTTTCTATTTTAAATAAAAAGATATATTACAGAA

WO 2004/030615

PCT/US2003/028547

3192/6881
FIGURE 2945

ATGGGGCAGCCGAGAGAGTTCTGGCATCTCAGGTCCCAGGTTCCAGTTCCAACCTGCCACCTGCTCACC GTGCAG
CCTTG GTGCCTGCTTCCTCACCCACCCAGCTGGAGGGCGTGAGCGCAGGCACAGTGCTTCCTCCCTGCTTGCG
GCTCTGTGCCTGAGGAAGGCGGTTCTGCGGCCCATCCTGCTGTCCTGCCTGGAGTTGGAGGGTGTGTGGTCTT
TCCCTG GGGCGGATGAAGGCTCCCTTGAGGGCGGCTGGCTCTGGGGACAGGGCCAGCTCCCACGAAGCTGCAG
CTTCTCCATGACTGGCAGAGCGAGCCTGGGCGAGTGGCTGGCAGCAAGGCCCTTCTCCGCCTCTCTCCCGGCA
GGCATTTCCTCGTCCAGCACCTGATGACCGTCTCATCCGCAAAACAGCCAGCTCTTACGGCACCGGTCCCG
GAAGGGCCACCTCCCCGCGCGGGGGCTGCAATGCGCAGTGGGGTGGGGCTCCGAGGAGGTACCCAGGGACAGC
CAAGGAGAGCCCGGCGGCCCGGCTGCCGCGCACAGGACCTCTTCCCTGGACGGGGCGGCGCTGGCGGTGCTC
TCCAGAACAGCCCCACGGGGCGGGGAGCCGTGCAGCCCTGGGAAGAAGGTGCAGACCCTGCCAGTTGGAAG
TCCTCCTTCGGGCAGCCGAGGTCCCTATCGGGAAGCCGAAGGGGGCGGCTCATCCCTGGAGGTGCCCATCATC
TCCTCCGGCGGGAAGTGGCTTATGAACGGGCTGTCTCCCTGCGCGGACACCGCCGGGCTCGTCGGGAGACCGG
CTCAAGGACTCGGGCTCCGTGCAGAGACTCTCCACCTACGACAATGTGCCGCGCGGGGCTGGTCCCCGGCATA
CCCAGCGTGGCCAGTATGGCGTGGTCCGGGGCTCGTCCAGCGAGTCGTGCGTGGGGGGCTCACTCAGCAGCTGC
ACGGCCTGCCGCGCCAGCGACTCGTCTGCCCGAGTTCCCTGCACACCGACTGGGCCCTGGAGCCCTCCCCGCTC
CCCAGCAGCAGCGAGGACCCCAAGTCCCTGGACCTGGACCACAGCATGGACGAGGCGGGCGGGGTGCCAGCAAC
AGCGAGCCAGCGAGCCGGACAGCCCCACCCGGGAACACGCGCGCCGCTCCGAGGCCTTACAGGGGCTGGTCACT
GAGCTCAGGGCCGAGCTGTGCCGCCAGCGGACTGAGTACGAGAGGAGTGTGAAAAGAATCGAAGAAGGGAGTGCT
GACCTGAGAAAACGAATGTCCCGGTTAGAAGAAGAACTGGACCAGGAAAAGAAAAATACATCATGCTGGAAATA
AAGCTGCGGAAGTCTGAACGGGCGCGGGAGGATGCGGAGAGGAGGAACCAGCTGTTGCAGAGGGAAATGGAGGAG
TTTTTTTCGACCCTAGGAAGCTTGACTGTTGGGGCAAAGGTGCCAGGGCCCCAAAGTAAAGGAATGGCAGAGC
TCACTTCTGTACCACGTCTGCTGGTCTCCAGCCTTGATGGAGTTAGAAGCGTCTGTATCTCTGGAGCAGCCAGG
CGCTCTGGAGCCAGCTGGAGAGAGAGAGATCCTGATACCTCTGTGGGACTGTGGGACTTTTGGGACCCACAC
ACTCCAGGTGGGATCAGATGCTGCTCCAACCATGCAGTTCCTGGTGAGGGTCAGAAGGGGACGGTACCAAGAGCA
GCGCTTAGCCCTTACCCAGGAAATATCCTTCATGGCCACAGAAATGGAGGGCGCCAGGATCCAGGCAGCCACCG
GGAACAGTCAGCTTTCTTTATTAAATGTGCTCACAAAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3193/6881
FIGURE 2946

MGQPREFWHLRSQVPVPTCHLLTVQPWCLLPHTPAGGRERRHSASSLLAALCLRKAVLRPHPAVLPGVGGCVVL
SSGRMKAPLRGGLALGTGPAPTKLQLLDHWQSEPGPSGWQQGPSPLFPAGTSLVQHLMTVLIRKHSQFTAPVP
EGPTSPRGGLQCAVGWGSEEVTRDSQGEPPGGLPAHRTSSLDGAAVAVLSRTAPTGPGRCSPPGKKVQTLPSWK
SSFRQPRSLSGSPKGGGSSLEVPIISSGGNWLMMGLSSLRGHRASSGDRLKDSGVSQRLSTYDNVPAPGLVPGI
PSVASMWSGASSSESVGGSLSSCTACRASDSSARSSLHTDWALEPSPLPSSSEDPKSLDLDSMDEAGAGASN
SEPSEPDSPTREHARRSEALQGLVTELRAELCRQRTYERSVKRIEESADLRKRMSRLEEELDQEKKKYIMLEI
KLRNSERAREDAERRNQLLQREMEEFFSTLGSLTVGAKGARAPK

WO 2004/030615

PCT/US2003/028547

3194/6881
FIGURE 2947

GGAGGAGGCAAGAGCCGACGCGAGGGGAGGGGAGCGCAGCGGGGGCTAACGGGCGGGCAAGCGGGCGGGCGGC
AACAGCATGTCCCTCGGCCAGCGCGGGCGGCCTCTTAGCGCGGGGGGGCTGCTCTGGGCGCGCCCCGGGC GAAG
TGCGCCAGTCTCCGGCCCCGGCCCCCTCGGCGCGCCCCGACTTCCC GGCGCCCCCTGAGCCCAGCAGCCGCGGGTC
CCGGGATCGGCTAAGAGTAGCTGCAACGCCTCGCCGACGGAGTCCTTTCTTTCCCGGGACGCTGGGCCATGAG
CTCCGCGGGCCACCTGAGGCACAGGGGAGTCTGCTCGGCCAGGACAGCCTCCCCGAAGTCCCGCTGCCCTCGCCT
CTGCACTGCGGGACGCCAGCGCTCGGCCCTGGCGGAGGCGTCTTCGGAAGAGCATCGGGGTGGGGGCATGGAATC
CGCGGAACCTGCGGGCCAGGCCCGGGCGGGCCACCAAGCTGTGCGAGGCTGTGGGCGCGGCGCTGCAGGAGCC
CCGGCGGCAGAGGCGCCTGGTGCTTGTTATCGTGTGCGTGGCGCTGTTACTGGACAACATGCTGTACATGGTCAT
CGTGCCCATAGTGCCCGACTACATCGCCACATGCGCGGGGGCGGCGAGGGCCCCACCCGGACTCCCAGGTTGTG
GGAGCCCACCCTGCCGCTGCCACTCCGGCCAATGCCAGCGCCTACACGGCCAACACCTCGGCGTCCCCGACAGC
TGCGTGGCCAGCGGGCTCAGCCCTTCGGCCCCGCTACCCTACGGAGAGCGAAGACGTGAAGATCGGGGTGCTGTT
TGCTTCCAAGGCTATCCTGCAGCTGCTAGTGAACCCCTTGAGCGGGCCCTTCATCGACCGCATGAGCTACGACGT
GCCGCTGCTGATCGGCCTGGGCGTCATGTTGCGCTCTACAGTCCTGTTGCGCTTCGCCGAGGACTACGCCACGCT
GTTGCGGGCGCGCAGCCTGCAGGGCCTGGGCTCAGCCTTCGCCGACACGTCTGGCATAGCCATGATCGCCGATAA
GTACCCGGAGGAGCCGGAGCGCAGTCGTGCACTGGGCGTGGCGCTGGCCTTCATTAGCTTCGGAAGCCTAGTGGC
CCCGCCCTTCGGGGGCATCCTCTATGAGTTGCGCGCAAGCGCGTGCCTTCTTGGTGCTAGCTGCCGTGTGCT
CTTTGACGCGCTGTTGCTGCTGGCAGTGGCCAAACCCCTTCTCGGCGGCTGCACGGGCTCGGGCCAACCTGCCAGT
GGGCACTCCCATCCACCGCCTCATGCTAGACCCCTACATTGCCGTGGTGGCCGGCGCGCTCACCACCTGTAACAT
TCCCCTCGCCTTCTCGAACCACCATTGCCACGTGGATGAAGCATACGATGGCGGCTTCCGAGTGGGAGATGGG
CATGGCCTGGCTGCCGGCCTTCGTGCTCATGTGCTGGGCGTCTACCTCACCGTGCGCCTGGCGGGCGCGCTACCC
ACACCTGCAGTGGCTGTACGGCGCGCTTGGGCTGGCTGTGATCGGCGCCAGCTCGTGATCGTGGCCGCTGCCG
CTCCTTCGCGCCGCTAGTGGTCTCACTATGCGGCCTCTGTTTTGGCATAGCCCTAGTCGACACAGCACTGCTGCC
CACGCTCGCCTTCTTGGTGGACGTGCGCCATGTCTCAGTCTATGGCAGCGTCTACGCCATCGCCGACATCTCCTA
TTCGGTGGCCTACGCGCTCGGGCCCATAGTGGCAGGCCACATTGTGCACTCGCTGGGCTTTGAGCAGCTCAGCCT
TGGCATGGGACTGGCCAACCTGCTCTATGCTCCCGTCTTGCTGCTGCTCCGCAACGTGGGCCTCCTGACGCGCTC
CCGTTCCGAGCGGATGTGCTGCTTGATGAGCCACCGCAAGGTCTGTACGATGCGGTGCGCCTGCGTGAGCGTCC
TGTGTCTGGCCAGGACGGCGAGCCTCGCAGCCCGCCTGGCCCTTTTGATGAGTGCGAGGACGACTACAATACTA
CTACACCCGCAGCTAGCATCCCCACTCCTCCTCCAGCCCCACCAACCGCCTTGGGTCAAGGGGGCTGCTCTGCAA
GCCCAGTGGCCAGCTCTGGCTCAGGGCCACCTCCTCCAGCGAGTACCCAGCCACTCCTCAACCTTGACTTCTG
CCCAATCCCCCTCCTGTGACCCGTTCCATATCCCTTTCTCTTGTCCAATGGGGCTTGGAGCACCGAGGCCAG
CGAAGCCATCGCGCTCCTTGCGGAGGTGAAGAGGACCCTGAGTCCCCACCTGCGGCTCCCCCTGTGTAGAGCCTGC
ATCTGCTGTCTCTTCTTCCATTGCTCCAGTGCCAACTTGGGCCGCTGCACCGCGCGCCTCCGCCCAATCA
ATAAACTGTGTCTGTCCCAGG

WO 2004/030615

PCT/US2003/028547

3195/6881
FIGURE 2948

MESAEPAGQARAAATKLSEAVGAALQEPRRQRLVLVIVCVALLLDNMLYMVIVPIVPDYIAHMRGGGEGPTRTP
EVWEPTLPLPTPANASAYTANTSASPTAAWPAGSALRPRYPTESEDKIGVLFASKAILQLLVNPLSGPFIDRMS
YDVPLLLIGLGVMAFASTVLFAFAEDYATLFAARSLQGLGSFADTSGIAMIADKYPEEPERSRALGVALAFISFGS
LVAPPFGGILYEFAGKRVFPLVLAAVSLFDALLLLAVAKPFSAAARARANLPVGTPIHRLMLDPYIAVVAGALT
CNIPLAFLEPTIATWMKHTMAASEWEMGMAWLPAFVPHVLGVYLTVRLAARYPHLQWLYGALGLAVIGASSCIVP
ACRSFAPLVVSLCGLCFGIALVDTALLPTLAFLVDVRHVSVYGSVYAIADISYSVAYALGPVAGHIVHSLGFEO
LSLGMGLANLLYAPVLLLLLRNVGLLTRSRSERDVLLEPPQGLYDAVRLRERPVSQGDEPRSPPGPFDECEDDY
NYYYTRS

WO 2004/030615

PCT/US2003/028547

3196/6881
FIGURE 2949

GGCACGAGCTCGGCTCCTGGAAAGATCGAGGCAGCGGAGACAGAGGCGGAAGCTGCAGCCCTAGAGGTCCTGGCT
GAGGTGGCAGGCATCTTGGAACCTGTAGGCCTGCAGGAGGAGGCAGAACTGCCAGCCAAGATCCTGGTTGAGTTT
GTGGTGGACTCTCAGAAGAAAGACAAGCTGCTCTGCAGCCAGCTTCAGGTAGCGGATTTCTGCAGAACATCCTG
GCTCAGGAGGACACTGCTAAGGGTCTCGACCCCTTGGCTTCTGAAGACACGAGCCGACAGAAGGCAATTGCAGCT
AAGGAACAATGGAAAGAGCTGAAGGCCACCTACAGGGAGCACGTAGAGGCCATCAAAATTGGCCTCACCAAGGCC
CTGACTCAGATGGAGGAAGCCCAGAGGAAACGGACACAACCTCCGGGAAGCCTTTGAGCAGCTCCAGGCCAAGAAA
CAAATGGCCATGGAGAAACGCAGAGCAGTCCAGAACCAGTGGCAGCTACAACAGGAGAAGCATCTGCAGCATCTG
GCGGAGGTTTTCTGCAGAGGTGAGGGAGCGTAAGACAGGGACTCAGCAGGAGCTTGACAGGGTGTTTCAGAACTT
GGAAACCTGAAGCAGCAGGCAGAACAGGAGCGGGACAAGCTGCAGAGGTATCAGACCTTCTCCAGCTTCTGTAT
ACCTTGAGGGTAAGCTGTTGTTCCCTGAGGCTGAGGCTGAGGCAGAGAATCTTCCAGATGATAAACCCAGCAG
CCGACTCGACCCAGGAGCAGAGTACAGGAGACACCATGGGGAGAGACCCTGGTGTGTCTTCAAGGCTGTGGT
CTACAACCTGCTGGAGATGTAAATTTGCCATGCACTTCTGGAGGACAGCAGCATGGAGAAAAGATCCTAGAAAAGG
TCAGACCCAACTCAGGCCTTGGTGTCCCTGGACTGCAAGTGTGGAAGGAGGGAAAGCCTGGTTTACCTCTCTCTG
CATCTGAGCTCTGCTACCCATGGAGCAGATGGATGGTGGGAACAGGAAAGAGCTTATGTTACACCTCATTCCCAT
GCTTAGCCCAACCAGAGCTAACCCCTGTCTTCTTCCCCAGGCCTCTGACTTCCCTCACCTCCCAACCATCATTAC
AGGAAAGACTGTGAACTCCTGAGTTCAGCTTGATTTCTGACTACATCCAGCAAGCTCTGGCATCTGTGGATTAA
AATCCCTGGATCTCTCTCAGTTGTGTATTTGTTTCATCTTCATATGCTGGCAGGAACAACATTAATACAGATACT
CAGAAGCCAATAACATGACAGGAGCTGGGACTGGTTTGAACACAGGGTGTGCAGATGGGGAGGGGGTACTGGCCT
TGGGCCTCCTATGATGCAGACATGGTGAATTTAATTCAAGGAGGAGGAGAATGTTTTAGGCAGGTGGTTATATGT
GGGAAGATAATTTTATTCATGGATCCAAATGTTTGTGAGTCCTTTTGTGCTAAGGTTCTTGCAGTGAACCAGAA
TTATAACAGTGAGCTCATCTGACTGTTTTAGGATGTACAGCCTAGTGTTAACATTCTTGGTATCTTTTTGTGCCT
TATCTAAAACATTTCTCGATCACTGGTTTCAGATGTTTATTATTATTTCTTTCAAAGATTCAGAGATTGGCT
TTTGTATCCACTATTGTATGTTTTGTTTCATTGACCTCTAGTGATACCTTGATCTTCCCACTTTCTGTTTCG
GATTGGAGAAGATGTACCTTTTTTGTCAACTCTTACTTTTATCAGATGATCAACTCACGTATTGGATCTTTATT
TGTTTTCTCAAATAAATATTTAAGGTTAAAAA

WO 2004/030615

PCT/US2003/028547

3197/6881
FIGURE 2950

MEAAETEAEAAALEVLAEVAGILEPVGLQEEAELPAKILVEFVVDSSQKKDKLLCSQLQVADFLQNILAQEDTAKG
LDPLASEDTSRQKAIAAKEQWKELKATYREHVEAIKIGLTKALTQMEEAQRKRTLREAFEQLQAKKQMAMEKRR
AVQNQWQLQQEKHLQHLAEVSAEVRERKTGTQQELDRVFQKLGNLKQQAEQERDKLQRYQTFLQLLYTLQGKLLF
PEAEAEAENLPDDKPQQPTRPQEQSTGDTMGRDPGVSFKAVGLQPAGDVNLP

WO 2004/030615

PCT/US2003/028547

3198/6881
FIGURE 2951

GATCGCGGAGTCGGTGCTTTAGTACGCCGCTGGCACCTTTACTCTCGCCGGCCGCGCGAACCCGTTTGAGCTCGG
TATCCTAGTGACACGCTTTTGCAAGCGACGGCGCCATGAGTCTGACTTCCAGTTCCAGCGTACGAGTTGAATGG
ATCGCAGCAGTTACCATTGCTGCTGGGACAGCTGCAATTGGTTATCTAGCTTACAAAAGATTTTATGTTAAAGAT
CATCGAAATAAAGCTATGATAAACCTTCACATCCAGAAAGACAACCCCAAGATAGTACATGCTTTTGACATGGAG
GATTTGGGAGATAAAGCTGTGTACTGCCGTTGTTGGAGGTCCAAAAAGTTCCCATTTCTGTGATGGGGCTCACACA
AAACATAACGAAGAGACTGGAGACAATGTGGGCCCTCTGATCATCAAGAAAAAAGAACTTAAATGGACACTTTT
GATGCTGCAAATCAGCTTGTCGTGAAGTTACCTGATTGTTTAATTAGAATGACTACCACCTCTGTCTGATTCACC
TTCGCTGGATTCTAAATGTGGTATATTGCAAACTGCAGCTTTCACATTTATGGCATTGTCTTGTGAAACATCG
TGGTGCACATTTGTTTAAACAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3199/6881
FIGURE 2952

MSLTSSSSVRVEWIAAVTIAAGTAAIGYLAYKRIFYVKDHRNKAMINLHIQKDNPKIVHAFDMEDLGDKAVYCRCW
RSKKFPFCDGAHTKHNEETGDNVGPLIIKKKET

WO 2004/030615

PCT/US2003/028547

3200/6881
FIGURE 2953

GGAAAGAAGGCCAAGGGAAAGAAGGTGGTTCCGGCCCCTGCTGTCATGAAAGAAGCAGGAGGCTAAGAAAGTGGTG
AATCCCCTGTTTGAAGAACGGCCTAAGAATTTTGGCATTGGACAGGACATCCAGCCCCAAAAGACACTTCACCCGC
TTTGTGAAATGGCCCTGCTATATCAGGTTGCAGCGGCAGAGAGCCATCCTCTATAAGGGGCTGAAAGTGCCTCCT
GCGATTAACCAAGTTCACCCAGGCCCTGGACCGCCAAACAGCTACTCAGCTGCTTAAGCTGGCCCACAAGTACAGA
CCAGAGACAAAAGACACTTTGGCTAAGCTGGTGGAAAGCTATCAGGACCAATTACAACGACAGATACAGATACGAT
GAGATCCGCTGTCACTGGGGCAGCAACGTCCTGGGTCCTAAGTCCGTGGCTCGTATCGCCAAGCTCGAAAAGGCA
AAGGCTAAAGAAGTTGCCACTAACTGGGTTAAATGTACACTGTTGAGTTTTCTGTACATAAAAAATAATTAAAT
AA

WO 2004/030615

PCT/US2003/028547

3201/6881
FIGURE 2954

MKKQEAKKVVNPLFEKRPKNFGIGQDIQPKRHFTRFVKWPCYIRLQRQRAILYKGLKVPPAINQFTQALDRQTAT
QLLKLAKHYRPETKDTLAKLVEAIRTNYNDRYRYDEIRCHWGSNVLGPKSVARIAKLEKAKAKELATKLG

WO 2004/030615

PCT/US2003/028547

3202/6881
FIGURE 2955

CCGTTGTGGCGAGCGCTACACGAGGCAAACGACTTCTCCCTTCTTTGAACTGGACCCCGCGAGCACCAGAGTCGG
CGTAACTATCGCCTGACAGGCATTTAAATCAAACGGTATTGAGATGGATTGGGTTATGAAACATAATGGTCCAAA
TGACGCTAGTGATGGGACAGTACGACTTCGTGGACTACCATTTGGTTGCAGCAAAGAGGAAATAGTTCAGTTCTT
TCAAGGGTTGGAAATCGTGCCAAATGGGATAACATTGACGATGGACTACCAGGGGAGAAGCACAGGGGAGGCCTT
CGTGCAGTTTGCTTCAAAGGAGATAGCAGAAAATGCTCTGGGAAACACAAGGAAAGAATAGGGGCACAGGTATAT
TGAGATCTTCAGAAGTAGCAGGAGTGAAATCAAAGGATTTTATGATCCACCAAGAAGATTGCTGGGACAGCGACC
GGGACCATATGATAGACCAATAGGAGGAAGAGGGGGTTATTATGGAGCTGGGCGTGGAAGTATGTATGACAGAAAT
GCGACGAGGAGGTGATGGATATGATGGTGGTTATGGAGGTTTTGATGACTATGGTGGCTATAATAATTACGGCTA
TGGGAATGATGGCTTTGATGACAGAATGAGAGATGGAAGAGGTATGGGAGGACATGGCTATGGTGGAGCTGGTGA
TGCAAGTTCAGGTTTTTCATGGTGGTCATTTTCGTACATATGAGAGGGTTGCCTTTTCGTGCAACTGAAAATGACAT
TGCTAATTTCTTCTCACCCTAAATCCAATACGAGTTCATATTGATATTGGAGCTGATGGCAGAGCCACAGGAGA
AGCAGATGTAGAGTTTGTGACACATGAAGATGCAGTAGCTGCCATGTCTAAAGATAAAAAATAACATGCAACATCG
ATATATTGAACTCTTCTGAATTCTACTCCTGGAGGCGGCTCTGGCATGGGAGGTTCTGGAATGGGAGGCTACGG
AAGAGATGGAATGGATAATCAGGGAGGCTATGGATCAGTTGGAAGAATGGGAATGGGGAACAATTACAGTGGAGG
ATATGGTACTCCTGATGGTTTGGGTGGTTATGGCCGTGGTGGTGGAGGCAGTGGAGGTTACTATGGGCAAGGCGG
CATGAGTGGAGGTGGATGGCGTGGGATGTACTGAAAGCAAAAACACCAACATACAAGTCTTGACAACAGCATCTG
GTCTACTAGACTTTCTTACAGATTTAATTTCTTTTGTATTTTAAAGAACTTTATAATGACTGAAGGAATGTGTTTT
CAAAATATTATTTGGTAAAGCAACAGATTGTGATGGGAAAATGTTTTCTGTAGGTTTATTTGTTGCATACTTTGA
CTTAAAAATAAATTTTTATATTCAAACCACTGATGTGTGATACTTTTTATATACTAGTTACTCTAAAGATGTGCT
GCCTTCATAAGATTTGGGTTGATGTATTTTACTATTAGTTCTACAAGAAGTAGTGTGGTGTAAATTTAGAGGATA
ATGGTTACCTCTGCGTAACTGCAAGTCTTAAGCAGACATCTGGAATAGAGCTTGACAAATAATTAGTGTAACT
TTTTTCTTTAGTTTCTCTGGACAACACTGTAAATATAAAGCCTAAAGATGAAGTGGCTTCAGGAGTATAAATTC
AGCTAATTATTTCTATATTATTATTTTCAAATGTCATTTATCAGGCATAGCTCTGAAACATTGATGATCTAAGA
GGTATTGATTTCTGAATATTTCATAATTGTGTTACCTGGGTATGAGAGTGTGGAGCTGAATTTAGCCCTAGAT
TTTGAGTAAACCCCTTCAGCACTTGACCGAAATACCAAAAATGTCTCCAAAAAATTGATAGTTGCAGGTTATC
GCAAGATGTCTTAGAGTAGGGTTAAGGTTCTCAGTGACACAAGAATTCAGTATTAAGTACATAGGTATTTACTAT
GGAGTATAATTCTCACAATTGTATTTTTCAGTTTTCTGCCCAATAGAGTTTAAATAACTGTATAAATGATGACTTT
AAAAAATGTAAGCAACAAGTCCATGTATAGTCAATAAAAACAATCCTGCAGTTGGGTTTTGTATCTGATCCCT
GCTTGGAGTTTTAGTTTAAAGAATCTATATGTAGCAAGGAAAAGGTGCTTTTTAATTTTAAATCCCTTTGATCAAT
ATGGCTTTTTTCCAAATTGGCTAATGGATCAAAATGAAACCTGTTGATGTGAATTCAGTTATTGAACCTGTTACT
TGTTTTTGCCAGAAATGTTATTAATAAATGTCAATGTGGGAGATAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3203/6881
FIGURE 2956

MDWVMKHNGPNDASDGTVRLRGLPFGCSKEEIVQFFQGLEIVPNGITLTMDYQGRSTGEAFVQFASKEIAENALG
KHKERIGHRYIEIFRSSRSEIKGFYDPPRLLGQRPGPYDRPIGGRGGYYGAGRGSYDRMRGGDGYDGGYGGF
DDYGGYNNGYGNDFDDMRDGRGMGGHGYGGAGDASSGFHGGHFVHMRGLPFRATENDIANFFSPLNPIRVHI
DIGADGRATGEADVEFVTHEDAVAAMSKDKNNMQHRYIELFLNSTPGGGSGMGGSGMGGYGRDGMNQGGYGSVG
RMGMGNNGYSGGYGTPDGLGGYGRGGGSGGYYGQGGMSGGGWRGMY

WO 2004/030615

PCT/US2003/028547

3204/6881
FIGURE 2957

GCATGGCCAAGGCCGGGCGGCCGCTTGCCCCCGCTTCCTTTACGCTGTCGCTGCCCCGTAGGTGGTTGTGGCCA
CTGTGCCCGGAGGGAGGCGGCGGTGGCCAGTAATGCCTGGGAACTCCTCTGGGGGGACATTATGGAGCTGGAAG
CACCCTTGGAGGAGTCCGAGAGCCAGAAGAAGGAGAGGCCAAAAGAGTGACAGAAGGAAGTCAAGGCACCATTATG
ACTCGGATGAGAAATCAGAAACAAGAGAAAATGGTGTACAGATGACCTGGATGCTCCCAAGGCCAAAAAATCTA
AAATGAAAGAGAAGCTAAATGGAGACACTGAAGAAGGATTTAATAGACTTTCAGATGAATTCTCCAAATCTCATA
AGTCAAGAAGAAAAGATCTACCAATGGAGATATAGATGAATATGAAAAAATCAAAGCGAGTATCATCTTTAG
ATACTTCTACTCATAAATCAAGTGATAATAAACTAGAGGAGACCTTAACACGTGAACAGAAAGAAGGAGCCTTCT
CCAATTTTCTATTTCTGAAGAGACTATAAAGCTTCTGAAAGGTCGAGGGGTAACATATCTCTTTCTTCTATTCAAG
TTAAGACCTTTGGTCTGTATATGAAGGAAAAGATTTAATAGCTCAAGCACGGACAGGAACAGGAAAGACATTCT
CTTTTGCCATCCCCTTAATTGAAAGACTCCAAAGAAATCAAGAAACAATTAAAAAAGCCGCTCACCAAAGGTAC
TTGTTTTGGCTCCAACAAGGGAAGTGGCAACCAAGTAGCCAAAGACTTCAAAGATATACTAGGAAACTCAGCG
TGGCGTGTTTTTATGGTGGAACATCATATCAAAGCCAAATTAATCATATTCGAAATGGTATTGACATCTTGGTTG
GAACACCTGGTCGTATCAAAGACCATCTGCAGAGTGGCCGATTGGATCTTTCTAAACTGCGACATGTTGTGCTTG
ATGAAGTGGATCAGATGTTAGATTTAGGTTTTGCTGAACAAGTTGAAGATATTATTATCATGAATCCTACAAAAGT
ATTCTGAAGACAATCCTCAGACTTTACTTTTTTCTGCAACTTGCCACAGTGGGTATACAAAGTTGCAAAAAAAT
ACATGAAATCCAGATATGAACAGGTTGACCTTGTGGAAAAATGACTCAAAGGCTGCAACTACTGTGGAACATT
TGGCCATCCAGTGTCAATTGGTCTCAGAGGCCAGCAGTTATTGGAGATGTCCTTCAAGTCTACAGTGGGTCTGAAG
GGAGGGCTATTATTTCTGTGAGACCAAGAAGAATGTAAGTGAATGGCCATGAATCCACACATAAAACAGAATG
CCCAGTGTTCATAGGGGACATTGCACAGTCACAAAGAGAAATTACACTAAAAGGCTTCAGAGAAGGTAGTTTTA
AAGTTTTGGTGGCAACCAATGTGGCTGCCCCGTGGTTTTGGACATTCTGAAGTTGACCTGGTGATTCAAAGTTCTC
CTCCTCAGGATGTTGAGTCCTATATCCATCGCTCTGGACGCACAGGTAGAGCTGGACGGACAGGGATTTGTATAT
GTTTTTATCAACCAAGAGAAAGAGGTCAACTAAGATATGTGGAACAAAAAGCAGGAATTACTTTTAAACGTGTAG
GTGTTCTTCTACAAATGGATTTAGTTAAATCTAAAAGCATGGATGCCATCAGGTCTCTGGCTTCCGTTTCTTATG
CTGCTGTTGATTTTTTCCGACCATCAGCTCAGAGACTGATAGAAGAGAAAGGTGCAGTGGATGCATTGGCTGCAG
CTTTAGCCACATTTCTGGTGCATCAAGCTTTGAACCACGATCTTTGATCACCTCTGATAAGGGGTTTTGTGACCA
TGACTCTGGAAAGCCTAGAGGAAATACAGGATGTCAGCTGTGCTTGGAAAGAACTTAACAGAAAGCTGAGTAGTA
ATGCAGTGTCTCAGATTACCAGAAATGTGCCTCCTGAAAGGAAATATGGGTGTTTGCTTTGATGTTCTTACAACATG
AGTCAGAAAGGTTACAGGCAGAGTGGCATGATTCGACTGGATACTCTCAGTGCCAGCCAAATTACCTGAAATTG
AAGAATATTATGATGGAACACATCTTCTAATTCAGACAGAGGAGTGGCTGGTCAAGTGGTCGATCAGGCCGGT
CAGGCCGGTCAGGTGGTCGATCTGGCGGCCGGTCAGGTAGACAGAGTCGACAAGGAAGTCGCTCAGGAAGTCGAC
AAGATGGTAGAAGACGAAGTGGGAATAGAAATCGATCAAGAAGTGGGGGCCACAAACGGAGTTTTGACTGAGTAT
TTGATAGTTAATCTACCAGTGTGAGCTTGCTATTCTGCCTAATCATGTACATTATCCACCAAAAATTAGGTCA
TCATAGTTGAGGTATGTGCTGCTATTTGCAAAGAAGTTGGTCGTATTTTTTTAAAAAGTATTTTACAAGAATGG
AACAAATCTACTTATCCAGTTATACCTTTGAATAAAAAAACCTCCTTTTATTGTCTCTTTTCAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

[illegible]

WO 2004/030615

PCT/US2003/028547

3206/6881
FIGURE 2959

CTACCTCTTCCTCTCCACGCGGTTGAGAAGACCGGTCGGCCTGGGCAACCTGCGCTGAAGATGCCGGGAAAACCTC
CGTAGTGACGCTGGTTTGGAAATCAGACACCGCAATGAAAAAGGGGAGACACTGCGAAAGCAAACCGAGGAGAAA
GAGAAAAAAGAGAAGCCAAAATCTGATAAGACTGAAGAGATAGCAGAAGAGGAAGAAACTGTTTTCCCAAAGC
TAAACAAGTTAAAAAGAAAGCAGAGCCTTCTGAAGTTGACATGAATTCTCTAAATCCAAAAAGGCAAAAAAGAA
AGAGGAGCCATCTCAAATGACATTTCTCTAAACC AAAAGTTTGAGAAAGAAAAAGGAGCCATTGAAAAGAA
AGTGGTTTTCTTCTAAACC AAAAAGTGACAAAAATGAGGAGCCTTCTGAGGAAGAAATAGATGCTCCTAAGCC
CAAGAAGATGAAGAAAGAAAAGGAAATGAATGGAGAACTAGAGAGAAAAGCCCCAACTGAAGAATGGATTTCC
TCATCCTGAACCGGACTGTAACCCAGTGAAGCTGCCAGTGAAGAAAGTAACAGTGAGATAGAGCAGGAAATACC
TGTGGAACAAAAGAAGGCGCTTTCTCTAATTTTCCCATATCTGAAGAACTATTAACTTCTCAAAGGCCGAGG
AGTGACCTTCCTATTTCTATACAAGCAAAGACATTCATCATGTTTACAGCGGGAAGGACTTAATTGCACAGGC
ACGGACAGGAAGTGGGAAGACATTTCTCTTTGCCATCCCTTTGATTGAGAACTTCATGGGGAAGTCAAGACAG
GAAGAGAGGCCGTGCCCTCAGGTACTGGTTCTTGACCTACAAGAGAGTTGGCAAATCAAGTAAGCAAAGACTT
CAGTGACATCACAAAAAGCTGTCAGTGGCTTGTTTTTATGGTGGAACTCCCTATGGAGGTCAATTTGAACGCAT
GAGGAATGGGATTGATATCCTGGTTGGAACACCAGGTCGTATCAAAGACCACATACAGAATGGCAAAGTATGATCT
CACCAAAGTTAAGCATGTTGTCTGGATGAAGTGGACCAGATGTTGGATATGGGATTTGCTGATCAAGTGAAGA
GATTTTAAGTGTGGCATAAAGAAAGATTCTGAAGACAATCCCCAACATTGCTTTTTCTGCAACTTGCCCTCA
TTGGGTATTTAATGTTGCCAAGAAATACATGAAATCTACATATGAACAGGTGGACCTGATTGGTAAAAAGACTCA
GAAAACGGCAATAACTGTGGAGCATCTGGCTATTAAGTGCCACTGGACTCAGAGGGCAGCAGTTATTGGGGATGT
CATCCGAGTATATAGTGGTCATCAAGGACGCACTATCATCTTTTGTGAAACCAAGAAAGAAGCCCAGGAGCTGTC
CCAGAATTCAGCTATAAAGCAGGATGCTCAGTCCTTGATGGAGACATTCACAGAAGCAAAGGGAAATCACCTT
GAAAGGTTTTAGAAATGGTAGTTTTGGAGTTTTGGTGGCAACCAATGTTGCTGCACGTGGGTAGACATCCCTGA
GGTTGATTTGGTTATACAAAGCTCTCCACCAAAGGATGTAGAGTCTACATTATCGATCCGGGCGGACAGGCAG
AGCTGGAAGGACGGGGGTGTGCATCTGCTTTTATCAGCACAAAGGAAGAAATATCAGTTAGTACAAGTGGAGCAAAA
AGCGGGAATTAAGTTCAAACGAATAGGTGTTCTTCTGCAACAGAAATAATAAAAGCTTCCAGCAAAGATGCCAT
CAGGCTTTTGGATTCCGTGCCTCCCACTGCCATTAGTCACTTCAAACAATCAGCTGAGAAGCTGATAGAGGAGAA
GGGAGCTGTGGAAGCTCTGGCAGCAGCACTGGCCCATATTTAGGTGCCACGTCCGTAGACCAGCGCTCCTTGAT
CAACTCAAATGTGGGTTTTGTGACCATGATCTTGAGTGCTCAATTGAAATGCCAAATATTAGTTATGCTTGGAA
AGAACTTAAAGAGCAGCTGGGCGAGGAGATTGATTCCAAAGTGAAGGGAATGGTTTTTCTCAAAGGAAAGCTGGG
TGTTTGCTTTGATGTACCTACCGCATCAGTAACAGAAATACAGGAGAAAATGGCATGATTCACGACGCTGGCAGCT
CTCTGTGGCCACAGAGCAACCAGAACTGGAAGGACCACGGGAAGGATATGGAGGCTTCAGGGGACAGCGGGAAGG
CAGTCGAGGCTTCAGGGGACAGCGGGACGGAACAGAAATTCAGAGGACAGCGGGAAGGCAGTAGAGGCCCGAG
AGGACAGCGATCAGGAGGTGGCAACAAAAGTAACAGATCCCAAAACAAAGGCCAGAAAGCGGAGTTTCAGTAAAGC
ATTTGGTCAATTAATTAGAAATAGAAGATTTATATAGCAAAAAGAGAAATGATGTTTGGCAATATAGAAGTGAACAT
TATTTTTCATGCAAAGTTAAAGCACATTTGTGCCTCCTTTTGACCACTTGCCAAGTCCCTGTCTCTTTCAGACAC
AGACAAGCTTCATTTAAATTATTTTCATCTGATCATTATCATTATAACTTTATTGTTACTTCATCAGTTTTTCT
TTTGAAAGGTGTATGAATTCATTACATTTTTATTCTAATGTATTATCTGTAGATTAGAAGATAAAATCAAGCATG
TATCTGCCTATACTTTGTGAGTTCACCTGTCTTTATACTCAAAAGTGTCCTTAATAGTGTCTTCCCTGAAATA
AATACCTAAGGGAGTGTAAACAGTCTCTGGAGGACCATTGAGCCTTTGGAAGTTAAGGTTTCCTCAGCCACCTG
CCGAACAGTTTCTCATGTGGTCTTATTATTTGTCTACTGAGACTTAATACTGAGCAATGTTTGAACAAGATTT
CAAATAATCTGGGTTGTAATACAGTTTATACCAGTGTATGCTCTAGACTTGGAAGATGTAGTATGTTTGTATGTG
GATTACCTATACTTATGTTTCGTTTTGATACATTTTAGCTTCTCATTATAAGGTGATTATGCTTTAGTGAATTC
TTCATAGATAGTATATATAAAGTACATTTTAATAGAAAGCCAGGGTTTTAAGGAATTCACATGTATAAGGTGG
CTCCATAGCTTTATTTGTAAGTAGGCTGGATAAATGGTGCTTAAATGGTAATGTACTCCACTTCTTCTATTGGA
AGATTAACATTATTTACCAAGAAGGACTTAAGGGAGTAAGGGGCGCAGATTAGCATTGCTCAAGAGTATGTAAAA
AAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3207/6881
FIGURE 2960

MNSPKSKKAKKKEEPSQNDISPKTKSLRKKKEPIEKKVVSSTKKVTKNEEPSEEEIDAPKPKMKKEKEMNGET
REKSPKLKNGFPHPEPDCNPSEAASEESNSEIEQEIPVEQKEGAFSNFPISEETIKLLKGRGVTFLEFP IQAKTFH
HVYSGKDLIAQARTGTGKTF SFAIPLIEKLHGELQDRKRGRAPQVLVLAPTRELANQVSKDFSDITKKLSVACFY
GGTPYGGQFERMRNGIDILVGTPGRIKDHIQNGKLDLTKLKHVVLEVDQMLDMGFADQVEEILSVAYKKDSEDN
PQTLLFSATCPHWVFNVAKKYMKSTYEQVDLIGKKTQKTAITVEHLAIKCHWTQRAAVIGDVIRVYSGHQGRTII
FCETKKEAQELSQNSAIKQDAQSLHGDIPQKQREITLKGFRNGSFGVLVATNVAARGLDIPEVDLVIQSSPPKDV
ESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVQVEQKAGIKFKRIGVPSATEIIKASSKDAIRLLDSVPPTAISH
FKQSAEKLIEEKGAVEALAAALAHISGATSVDQSLINSNVGFVTMILQCSIEMPNISYAWKELKEQLGEEIDSK
VKGMVFLKGKLGVCFDVPTASVTEIQEKWHSRRWQLSVATEQPELEGPREGYGGFRGQREGSRGFRGQRDGNRR
FRGQREGSRGPRGQRSGGGNKSNSQNKGQKRSFSKAFGQ

WO 2004/030615

PCT/US2003/028547

3208/6881
FIGURE 2961

GAATTCCGCTAGACTAAGTTGGTCATGATGCAGAAGCTACTCAAATGCAGTCGGCTTGTCTGGCTCTTGCCCTC
ATCCTGGTTCTGGAATCCTCAGTTCAAGGTTATCCTACGCAGAGAGCCAGGTACCAATGGGTGCGCTGCAATCCA
GACAGTAATTCTGCAAACTGCCTTGAAGAAAAAGGACCAATGTTCGAACTACTTCCAGGTGAATCCAACAAGATC
CCCCGTCTGAGGACTGACCTTTTTCCAAAGACGAGAATCCAGGACTTGAATCGTATCTTCCCACCTTTCTGAGGAC
TACTCTGGATCAGGCTTCGGCTCCGGCTCCGGCTCTGGATCAGGATCTGGGAGTGGCTTCCTAACGGAAATGGAA
CAGGATTACCAACTAGTAGACGAAAGTGATGCTTTCCATGACAACCTTAGGTCTCTTGACAGGAATCTGCCCTCA
GACAGCCAGGACTTGGGTCAACATGGATTAGAAGAGGATTTTATGTTATATAAGAGGATTTTCCCACCTTGACAC
CAGGCAATGTAGTTAGCATATTTTATGTACCATGGTTATATGATTAATCTTGGGACAAAGAATTTTATAGAAATT
TTTAAACATCTGAAAAAGAAGCTTAAGTTTTATCATCCTTTTTTTTTCTCATGAATTCCTTAAAGGATTATGCTTTA
ATGCTGTTATCTATCTTATTGTTCTTGAAATACCTGCATTTTTTGGTATCATGTTCAACCAACATCATTATGAA
ATTAATTAGATTCCCATGGCCATAAAATGGCTTTAAAGAATATATATATATTTTTTAAAGTAGCTTGAGAAGCAAA
TTGGCAGGTAATATTTTATACCTAAATTAAGACTCTGACTTGGATTGTGAATTATAATGATATGCCCTTTTCTT
ATAAAAACAAAAAAAAAATAATGAAACACAGTGAATTTGTAGAGTGGGGGTATTTGACATATTTTACAGGGTGGA
GTGTACTATATACTATTACCTTTGAATGTGTTTGCAGAGCTAGTGGATGTGTTTGTCTACAAGTATGATTGCTGT
TACATAACACCCCAAATTAACCTCCCAAATTAACACAGTGTGTCTGTCAATACCTCATACTGCTTTACCTTTTT
TTCTGGATATCTGTGTATTTTCAAATGTTACTATATATTAAAGCAGAAATATAACC

WO 2004/030615

PCT/US2003/028547

3209/6881
FIGURE 2962

MMQKLLKCSRLVLALALILVLESSVQGYPTQRARYQWVRCPDSNSANCLEEKGPMFELLPGESNKIPRLRTDLF
PKTRIQDLNRIFPLSEDYSGSGFGSGSGSGSGSGSGFLTEMEQDYQLVDESDAFHDNLRSLDRNLPSDSQDLGQH
GLEEDFML

WO 2004/030615

PCT/US2003/028547

3210/6881
FIGURE 2963

GAACGCCGGTGGCGGGGCTGGTAGCCCGGCAGCCGCAGGTGGGGCCACGAGCGCTGGCTGAGGGACCGAGCCGGA
GAGCCCCGGAGCCCCCGTAACCCGCGCGGGGAGCGCCAGGATGCCGCGCGGGGACTCGGAGCAGGTGCGCTACT
GCGCGCGCTTCTCTACCTCTGGCTCAAGTTTTCACTTATCATCTATTCCACCGTGTCTGGCTGATTGGGGCCC
TGGTCTGTCTGTGGGCATCTATGCAGAGGTTGAGCGGCAGAAATATAAAACCCTTGAAAGTGCCCTCTCGGCTC
CAGCCATCATCTCATCTCTGGGCGTCGTCATGTTTCATGGTCTCCTTCATTGGTGTGCTGGCGTCCCTCCGTG
ACAACCTGTACCTTCTCCAAGCATTTCATGTACATCCTTGGGATCTGCCTCATCATGGAGCTCATTGGTGGCGTGG
TGGCCTTGACCTTCCGGAACCAGACCATTGACTTCTGAACGACAACATTCGAAGAGGAATTGAGAATACTATG
ATGATCTGGACTTCAAAAACATCATGGACTTTGTTTCAGAAAAAGTTCAAGTGCTGTGGCGGGGAGGACTACCGAG
ATTGGAGCAAGAATCAGTACCACGACTGCAGTGCCCTGGACCCCTGGCCTGTGGGGTGCCCTACACCTGCTGCA
TCAGGAACACGACAGAAGTTGTCAACACCATGTGTGGCTACAAAATATCGACAAGGAGCGTTTCAGTGTGCAGG
ATGTTCATCTACGTGCGGGGCTGCACCAACGCCGTGATCATCTGGTTCATGGACAATAACCATCATGGCGGGCA
TCCTCTGGGCATCCTGCTTCCCCAGTTCTGGGGGTGCTGCTGACGCTGCTGTACATCACCCGGGTGGAGGACA
TCATCATGGAGCACTCTGTCACTGATGGGCTCCTGGGGCCCGGTGCCAAGCCAGCGTGGAGGCGGCAGGCACGG
GATGCTGCTTGTGCTACCCCAATTAGGGCCAGCCTGCCATGGCAGCTCCAACAAGGACCGTCTGGGATAGCACC
TCTCAGTCAACATCGTGGGGCTGGACAGGGCTGCGGCCCTCTGCCACACTCAGTACTGACCAAAGCCAGGGCT
GTGTGTGCCTGTGTGTAGGTCCACGGCCTCTGCCTCCCAGGGAGCAGAGCCTGGGCCTCCCTAAGAGGCTTT
CCCCGAGGCAGCTCTGGAATCTGTGCCACCTGGGGCCTGGGGAACAAGGCCCTCCTTTCTCCAGGCCTGGGCTA
CGGGGGAGGGAGAGCCTGAGGCTCTGCTCAGGGCCCATTTTCATCTCTGGCAGTGCCTTGGCGGTGGTATTCAAGG
CAGTTTTGTAGCACCTGTAATTGGGGAGAGGGAGTGTGCCCTCGGGGCAGGAGGGAAGGGCATCTGGGGAAGGG
CAGGAGGGAAGAGCTGTCCATGCAGCCACGCCCATGGCCAGGTTGGCCTCTTCTCAGCCTCCCAGGTGCCTTGAG
CCCTCTTGCAAGGGCGGCTGCTTCCTTGAGCCTAGTTTTTTTTACGTGATTTTTGTAAACATTCATTTTTTTGTACA
GATAACAGGAGTTTTCTGACTAATCAAAGCTGGTATTTCCCGCATGTCTTATTCTTGCCCTTCCCCCAACCAGTT
TGTTAATCAAACAATAAAAACATGTTTTTTTTT

WO 2004/030615

PCT/US2003/028547

3211/6881
FIGURE 2964

GGGCTCTCTCCTTGTCTAGTCGGCGCCGCGTGC GGGCTGGTGGCTCTGTGGCAGCGGCGGCGGCAGGACTCCGGCA
CT**ATG**AGCGGCTTCAGCACCGAGGAGCGCGCCGCGCCCTTCTCCCTGGAGTACCGAGTCTTCCTCAAAAATGAGA
AAGGACAATATATATCTCCATTTTCATGATATTCCAATTTATGCAGATAAGGATGTGTTTCACATGGTAGTTGAAG
TACCACGCTGGTCTAATGCAAAAATGGAGATTGCTACAAAGGACCCTTTAAACCTATTAAACAAGATGTGAAAA
AAGGAAAACCTTCGCTATGTTGCGAATTTGTTCCCGTATAAAGGATATATCTGGAACCTATGGTGCCATCCCTCAGA
CTTGGAAGACCCAGGGCACAATGATAAACATACTGGCTGTTGTGGTGACAATGACCCAATTGATGTGTGTGAAA
TTGGAAGCAAGGTATGTGCAAGAGGTGAAATAATTGGCGTGAAAGTTCTAGGCATATTGGCTATGATTGACGAAG
GGGAAACCGACTGGAAAGTCATTGCCATTAATGTGGATGATCCTGATGCAGCCAATTATAATGATATCAATGATG
TCAAACGGCTGAAACCTGGCTACTTAGAAGCTACTGTGGACTGGTTTTAGAAGGTATAAGGTTCTTGATGGAAAAC
CAGAAAATGAGTTTTCGTTTAAATGCAGAATTTAAAGATAAGGACTTTGCCATTGATATTATTAAGCACTCATG
ACCATTGGAAAGCATTAGTGACTAAGAAAACGAATGGAAAAGGAATCAGTTGCATGAATACAACCTTTGTCTGAGA
GCCCCCTCAAGTGTGATCCTGATGCTGCCAGAGCCATTGTGGATGCTTTACCACCACCTGTGAATCTGCCGTGCA
CAGTACCAACAGACGTGGATAAGTGGTTCCATCACCAGAAAACT**TAAT**GAGATTTCTCTGGAATACAAGCTGATA
TTGCTACATCGTGTTCATCTGGATGTATTAGAAGTAAAGTAGTAGCTTTTCAAAGCTTTAAATTTGTAGAACTC
ATCTAACTAAAGTAAATTTCTGCTGTGACTAATCCAATATACTCAGAATGTTATCCATCTAAAGCATTTTTTCATAT
CTCAACTAAGATAACTTTTAGCACATGCTTAAATATCAAAGCAGTTGTCAATTTGGAAGTCATTGTGAATAGATG
TGCAAGGGGAGCACATATTGGATGTATATGTTACCATATGTTAGGAAATAAAATTATTTTGCTGAAAAAAAAA
AAAAAA

WO 2004/030615

PCT/US2003/028547

3212/6881
FIGURE 2965

MSGFSTEERAAPFSLEYRVFLKNEKGQYISPFHDIPYADKDVFMVVEVPRWSNAKMEIATKDPLNPIKQDVKK
GKLRYVANLFPYKGYIWNYGAIPTWEDPGHNDKHTGCCGDNDPIDVCEIGSKVCARGEIIGVKVLGILAMIDEG
ETDWKVIAINVDDPDAANYNDINDVKRLKPGYLEATVDWFRYKVPDGGKPENEFAFNAEFKDKDFAIDIIKSTHD
HWKALVTKKTNGKGISCMNTTLESFPKCDPDAARAIVDALPPPCESACTVPTDVKWFHHQKN

WO 2004/030615

PCT/US2003/028547

3213/6881
FIGURE 2966A

ATGAGCTGCTCAAGGCTCATTACACGTTGGGCCGGCTCTCGGACAACACCCCTGAGCACTACCTGGTGCAAGGCC
GCTACTTCCTGGTGC GGATGTCACTGAGAAGATGGATGTGCTGGGCACCGTGGGAAGCTGTGGGGCCCCCACT
TCCGGCAGGTGCAGGGTGGGCTCACTGTGTTGGGCATGGGACAGCCAGCCTCTCAGGGTTCAGGCGGGTCCTCC
AGAAACTCCAGAAGGACGGACATAGGGAGTGTGTCTCTTCTGTGTGCGGGAGGAACCTGTGCTTTTCTCGCTG
CAGATGAGGACTTTGTGTCTACACACCTCGAGACAAGCAGAACCTTCATGAGAACCTCCAGGGCCTTGAGCCCG
GGGTCCGGGTGGAGAGCCTGGAGCTGGCCATCCGGAAGAGATCCACGACTTTGCCAGCTGAGCGAGAACACAT
ACCATGTGTACCATAACACCGAGGACCTGTGGGGGGAGCCCCATGCTGTGGCCATCCATGGTGAGGACGACTTGC
ATGTGACGGAGGAGGTGTACAAGCGGCCCTCTTCTGTCAGCCACCTACAGGTACCACCGCTGCCCTGCCCG
AGCAAGGGAGTCCCCTGGAGGCCAGTTGGACGCCTTTGTGAGTGTCTCCGGGAGACCCCCAGCCTGCTGCAGC
TCCGTGATGCCCCAGGGCCTCCCCAGCCCTCGTCTTACAGCTGCCAGATGGGCGTGGCAGGACCAACCTGGGCA
TGGTCTCGGGCACCCTCATCTGCTTACCGCAGTGGGACCACCTCCCAGCCAGAGGCTGCCCCACGCGAGGCCA
AGCCCCGCTATGGAGCAGTTCCAGGTGATCCAGAGCTTTCTCCGCATGGTGCCCCAGGGAAGGAGGATGGTGG
AAGAGGTGGACAGAGCCATCACTGCCTGTGCCAGTTGCATGACCTGAAAGAAGTGGTCTTGGA AAAACAGAGA
AGTTAGAAGGTATCCGACCGGAGAGCCCAGCCCAGGGAAGCGGCAGCCGACACAGCGTCTGGCAGAGGGCGCTGT
GGAGCCTGGAGCGATACTTCTACCTGATCTGTTAACTACTACCTTCATGAGCAGTACCCGCTGGCCTTTGCC
TCAGTTTCAGCCGCTGGCTGTGTGCCACCCCTGAGCTGTACCGCCTGCCCGTGACGCTGAGCTCAGCAGGCCCTG
TGGTCCGAGGGACCTCATCGCCAGGGGCTCCCTACGGGAGGACGATCTGGTCTCCCGGACGCGCTCAGCACTG
TCAGAGAGATGGATGTGGCCAACTTCCGGCGGGTGCCCCGCATGCCCATCTACGGCACGGCCCCAGCCCAGCGCCA
AGGCCCTGGGGAGCATCTGGCCTACCTGACGGACGCCAAGAGGAGGCTGCGGAAGGTTGTCTGGGTGAGCCTTC
GGGAGGAGGCCGTGTTGGAGTGTGACGGGCACACCTACAGCCTGCGGTGGCCTGGGCCCCCTGTGGCTCCTGACC
AGCTGGAGACCCTGGAGGCCAGCTGAAGGCCCATCTAAGCGAGCCTCCCCAGGCAAGGAGGGCCCCCTGACCT
ACAGGTTCCAGACCTGCCTTACCATGCAGGAGGTCTTACGCCAGCACCGCAGGGCCTGTCTGGCCTCACTACC
ACCGCATCCCCATGCCGACTTCTGTGCCCCCCGAGAGGAGGACTTTGACCAGCTGCTGGAGGCCCTGCGGGCCG
CCCTCTCCAAGGACCCAGGCACTGGCTTCGTGTTACGCTGCCTCAGCGGCCAGGGCCGTACCACAACCTGCGATGG
TGGTGGCTGTCTGGCCTTCTGGCACATCCAAGGCTTCCCCGAGGTGGGTGAGGAGGAGCTCGTGAGTGTGCCCTG
ATGCCAAGTTCACCTAAGGGTGAATTTAGGTAGTAATGAAGGTGGTGCAGCTGCTACCCGATGGGCACCGTGTGA
AGAAGGAGGTGGACGCGAGCGCTGGACACTGTGACGAGACCATGACGCCCATGCACTACCACCTGCGGGAGATCA
TCATCTGCACCTACCGCCAGGCGAAGGCAGCGAAAGAGGCGCAAGAAATGCGGAGGCTGCAGCTGCGGAGCCTGC
AGTACTTGGAGCGCTATGTCTGCCTGATTCTCTTCAACGCGTACCTCCACCTGGAGAAGGCCGACTCCTGGCAGA
GGCCCTTACGACCTGGATGCAGGAGGTGGCATCGAAGGCTGGCATCTACGAGATCCTTAACGAGCTGGGCTTCC
CCGAGCTGGAGAGCGGGGAGGACCAGCCCTTCTCCAGGCTGCGCTACCGGTGGCAGGAGCAGAGCTGCAGCCTCG
AGCCCTCTGCCCCGAGGACTTGCTGTAGGGGGCCTTACTCCCTGTCCCCCACCCACAGGGCCCCACGAGGCC
TGGGGTGTCTGAGGTGCTCTTGGCTGGGAGCGGCCCTGAGGGGTGCTGGCCTTGAATGATTCCCCACTTCTCTG
GAGAGACTGAGCGGAGTTGGGAGCCTTTTGAAGAAGAACTTTTATAGGACAGGGAGACAGCACAGCCATCCCTT
GCAAACCACCAAGGTGTGTGGCTGACCTCCAGGGAGGAGCACTCACTGGAGTGCTCACAAGGTGCACACTGCTGT
GTGTACCTTGCAGACAGGCCGGCGTTAGCCTCCAAGGGGCTCACTCCCCAGTTGCCAAACACTGTGGATCTCT
CTGTCTCTTCTCCCCCTCTCTCAGATTGGCCTGGCAGCCCTGGCACAGAGCAGACCCGGCCACTGGTAGCTCCC
CACTTCCTTACTCCTGCTGCTCTGCCATTGCCGCTCCCTTGTGTGCTGCCAAGCACTGCCCTCGGGCGTCTGGC
AGCCTGAGGTGGGTGGAGGGGACAGTGTCTGGATAGATCTATTATGTGAAAGGCAGCTTACCCAGTTTCTGG
ACTCTCATGCCCCCATCTCCGACCTGGGAGACTTCAGGAATGACAACCTACCCAGCCTGGTGGGGCTGGCAGGAT
GGTGGAGGTTTCTCAAGGAGCTGGAGACTTCAGGGAGCCCCCTCTCATGGGGAGGAAAGAGCTTCCAGGGGGCGAA
CGCAGCACAGAGGAAGAGGCCTGCTCCACTTGTCTGGGAACCTGGGCAGGAGGCACAGAGGAAGCCAAGGCCTGG
AGCTGCAGGTCCCCCGGCATCTCTCTGTGCCGCGAGCCAGGATGGCCTGGTGCCCCACCTGCTGCAGCAGG
AGCCCCAAGGAGTGCTAGCTGAGGGTGGTTGCTGGGGTGGTCTCATGGACAGTGAGGTGTGCAAGGGTGCAGTG
AGGGTGGTGGGAGGGGATCAGCTGGGTTCAGGCCATCCTTGCTGAGCATCTTTGAGCCTGCCCTTCCGGTGGGAG
CAGAAAAGGCCAGACCCTGCTGAGTTAGAGGCTGCTGGGATCCACTGTTTCCACACAGCGGGAAGGCTGCTGGGA
ACAGGTGGCAGAGAAGTGCCATGTTTGCCTGAGCCTTGACGCTCTTCCAGCTGGGGACTGGTGTCTGCTGAAAC
CCAGGAGCTGAACAGTGAGGAGGCTGTCCACCTTGCTTGGCTCACTGGGACCAGGAAAGCCTGTCTTTGGTTAGG

WO 2004/030615

PCT/US2003/028547

3214/6881

FIGURE 2966B

CTCGTGTACTTCTGCAGGAAAAAAAAAAGGATGTGTCATTGGTCATGATATTTGAAAAGGGGAGGAGGCCGAA
GTTGTTCCCATTTATCCAGTATTGGAAAATATTTGACCCCTTGGCTGAATTCTTTGCAGAACTACTGTGTGTC
TGTTCACTACCTTTTCAGGTTTATTGTTTTTATTTTGCATGAATTAAGACGTTTTAATTTCTTGCAGACAAGG
TCTAGATGCGGAGTCAGAGATGGGACTGAATGGGGAGGGATCCTTTGTGTTCTCATGGTTGGCTCTGACTTTCAG
CTGTGTTGGGACCACTGGCTGATCACATCACCTCTCTGCCTCAGTTTCCCCTCTGTAAATGGGAGATAATAC
TTGCCACCTACCTCACAGGGGTGTTGTGAGGATTCATTTGTGATTTTTTTTTTTTTTTGTACAGAGCTTTTAAGC
ATTAAAAACAGCTAAATGTG

WO 2004/030615

PCT/US2003/028547

3215/6881
FIGURE 2967

MGTTASTAQQTVSAGTPFEGLQGSGTMDSRHSVSIHSFQSTSLHNSKAKSIIPNKVAPVVITYNCKEEFQIHDEL
LKAHYTLGR LSDNTPEHYLVQG RYFLVRDVTEKMDVLGTVGSCGAPNFRQVQGGLTVFGMGQPSLSGFRRLQKL
QKDG HREC VIFCVREEPVLF LRADEDFVSYTPRDKQNLHENLQGLGPGVRVESLELAIRKEIHDF AQLS ENTYHV
YHNTE DLWGEPHAVA IHGEDDLHVTEE VYKRPLFLQPT YRYHRLPLPEQGS PLEAQLDAFVSVLRET PSLQLRD
AHGPPP ALVFSQMGVGR TNLGMVLGTLILLHRS GTTSQPEAAPTQAKPLPMEQFQVIQSFLRMVPQGRRMVEEV
DRAITACAE LHDLKEVVLENQKKLEGIRPESPAQGS GSRHSVWQRALWSLERYFYLI LFNYYLHEQYPLAFALSF
SRWLCAHP ELYRLPVT LSSAGPVAPRDLIARGSLREDDLVSPDALSTVREMDVANFRVRPMP IYGTAPSAKAL
GSILAYLTDAKRRLRKVVVWVSLREEAVLECDGHTYSLRWPGPPVAPDQLETLEAQLKAHLSEPPPGKEGPLTYRF
QTCLTMQE VFSQHRRACPGLTYHRIPMPDFCAPREEDFDQLLEALRAALSKDPGTGFVFSCLSGQGRTTTAMVVA
VLAFWHIQGFPEVGEEELVSVPDAKFTKGEFQVVMKVQQLLPDGH RVKKEVDAALDTVSETMTMPMHYHLREIIC
TYRQAKAAKEAQEMRRLQLRSLQYLERYVCLILFNAYLHLEKADSWQRPFS TWMQEVASKAGIYEILNELGFPEL
ESGEDQPF SRLRYRWQEQSCSLEPSAPEDLL

WO 2004/030615

PCT/US2003/028547

3216/6881
FIGURE 2968

CCGCCGTCTAGCGCCCCGACCTCGCCACCAATGAGAGCCCTGCTGGCGCGCCTGCTTCTCTGCGTCCTGGTCTGTGA
GCGACTCCAAAGGCAGCAATGAACTTCATCAAGTTCCATCGAACTGTGACTGTCTAAATGGAGGAACATGTGTGT
CCAACAAGTACTTCTCCAACATTCACTGGTGCAACTGCCCAAAGAAATTCGGAGGGCAGCACTGTGAAATAGATA
AGTCAAAAACCTGCTATGAGGGGAATGGTCACTTTTACCGAGGAAAGGCCAGCACTGACACCATGGGCCGGCCCT
GCCTGCCCTGGAACCTCTGCCACTGTCCTTCAGCAAACGTACCATGCCACAGATCTGATGCTCTTCAGCTGGGCC
TGGGGAACATAATTACTGCAGGAACCCAGACAACCGGAGGCGACCCTGGTGCTATGTGCAGGTGGGCCTAAAGC
TGCTTGTCCAAGAGTGCATGGTGCATGACTGCGCAGATGGAAAAAGCCCTCCTCTCCTCCAGAAGAATTAAAAAT
TTCAGTGTGGCCAAAAGACTCTGAGGCCCCGCTTTAAGATTATTGGGGGAGAATTCACCACCATCGAGAACCAGC
CCTGGTTTGGGCCATCTACAGGAGGCACCGGGGGGCTCTGTACCTACGTGTGTGGAGGCAGCCTCATCAGCC
CTTGCTGGGTGATCAGCGCCACACACTGCTTCATTGATTACCCAAAGAAGGAGGACTACATCGTCTACCTGGGTCT
GCTCAAGGCTTAACCTCCAACACGCAAGGGGAGATGAAGTTTGAGGTGGAAAACCTCATCCTACACAAGGACTACA
GCGCTGACACGCTTGCTCACCACAACGACATTGCCTTGCTGAAGATCCGTTCCAAGGAGGGCAGGTGTGCGCAGC
CATCCCGGACTATACAGACCATCTGCCTGCCCTCGATGTATAACGATCCCCAGTTTGGCACAAGCTGTGAGATCA
CTGGCTTTGGAAAAGAGAATTCTACCGACTATCTCTATCCGGAGCAGCTGAAAATGACTGTTGTGAAGCTGATTT
CCCACCGGGAGTGTGAGCAGCCCCACTACTACGGCTCTGAAGTCACCACCAAATGCTGTGTGCTGCTGACCCAC
AGTGGAAAACAGATTCTGCCAGGGAGACTCAGGGGGACCCCTCGTCTGTTCCCTCCAAGGCCGCATGACTTTGA
CTGGAATTGTGAGCTGGGGCCGTGGATGTGCCCTGAAGGACAAGCCAGGCGTCTACACGAGAGTCTCACACTTCT
TACCTTGGATCCGCAGTCACACCAAGGAAGAGAATGGCCTGGCCCTCTCAGGGTCCCCAGGGAGGAAACGGGCAC
CACCGCTTTCTTGCTGGTTGTCATTTTTGCAGTAGAGTCATCTCCATCAGCTGTAAGAAGAGACTGGGAAGATA
GGCTCTGCACAGATGGATTTGCCTGTGCCACCCACCAGGGCGAACGACAATAGCTTTACCTCAGGCATAGGCCT
GGGTGCTGGCTGCCCAGACCCCTCTGGCCAGGATGGAGGGGTGGTCTGACTCAACATGTTACTGACCAGCAACT
TGCTTTTTCTGGACTGAAGCCTGCAGGAGTTAAAAAGGGCAGGGCATCTCCTGTGCATGGGTGAAGGGAGAGCC
AGTCCCCCGACGGTGGGCATTTGTGAGGCCCATGGTTGAGAAATGAATAATTTCCCAATTAGGAAGTGTAAACAG
CTGAGGTCTCTTGAGGGAGCTTAGCCAATGTGGGAGCAGCGTTTGGGGAGCAGAGACACTAACGACTTCAGGGC
AGGGCTCTGATATTCCATGAATGTATCAGGAAATATATATGTGTGTGTATGTTTGCACACTTGTGTGTGGCTGT
GAGTGTAAGTGTGAGTAAGAGCTGGTGTCTGATTGTTAAGTCTAAATATTTCTTAAACTGTGTGGACTGTGATG
CCACACAGAGTGGTCTTTCTGGAGAGGTTATAGGTCACTCCTGGGGCCTCTTGGGTCCCCACGTGACAGTGCCT
GGGAATGTATTATTCTGCAGCATGACCTGTGACCAGCACTGTCTCAGTTTCACTTTACATAGATGTCCCTTTCT
TGCCAGTTATCCCTTCCTTTTAGCCTAGTTCAATCCTCACTGGGTGGGGTGGAGACCACCTCCTGTACACT
GAATATTTATATTTCACTATTTTATTTATATTTTGTAAATTTAAATAAAAGTGATCAATAAAATGTGATTTT
CTGA

WO 2004/030615

PCT/US2003/028547

3217/6881
FIGURE 2969

MRALLARLLLCVLVVSDSKGSNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTCYEGNG
HFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGKHNYCRNPDNRRRPWCYVQVGLKLLVQECMVHD
CADGKKPSSPPEELKFQCGQKTLRPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTYVCGGSLISPCWVISATHC
FIDYPKKEDYIVYLGRSRLNSNTQGEMKFEVENLILHKDYSADTLAHHNDIALLKIRSKEGRCAQPSRTIQTICL
PSMYNDPQFGTSCEITGFGKENSTDYLYPEQLKMTVVKLISHRECQQPHYYGSEVTTKMLCAADPQWKTDSCQGD
SGGPLVCSLQGRMTLTGIVSWGRCALKDKPGVYTRVSHFLPWIRSHSTKEENGLAL

WO 2004/030615

PCT/US2003/028547

3218/6881
FIGURE 2970

GCGGATCATCCGCTTCCGGAGTCGAGGTTTTTCGGGCTTGTACCGCTTGGCGGTGCGGCCTGGTGTGCGGCTTGCAG
GTTCTTTCTGTGTTTGTCTCTGCCCTGCCAAGGCCGTAGAGCTGGTGCGTGCGGGTAGCGGGGCTCTCCGAGGA
GCCGCACGCCGGCGGCACCATGGTCCACCTCACTACTCTCCTCTGCAAGGCCTACCGTGGGGGCCACTTAACCAT
CCGCCTTGCCCTGGGTGGCTGCACCAATCGGCCGTTCTACCGCATTGTGGCTGCTCACAACAAGTGTCCCAGGGA
TGGCCGTTTCGTAGAGCAGCTGGGCTCCTATGATCCATTGCCCAACAGTCATGGAGAAAACTCGTTGCCCTCAA
CCTAGACAGGATCCGTCATTGGATTGGCTGCGGGGCCACCTCTCTAAGCCTATGGAAAAGCTTCTGGGTCTTGC
TGGCTTTTTCCCTCTGCATCCTATGATGATCACAATGCTGAGAGACTGCGAAGGAAACGGGCACGTGAAGTCCT
GTTAGCTTCTCAGAAAAACAGATGCAGAAGCTACAGATACAGAGGCTACAGAAACATAAATGAGCTGACTTTAGTG
AGCATAGCAGTGGGAACAAGGTCAAGGTCCTTTTGAAACACTGCAGCGATCTTAATTTTGTTAGATTGGAGTTC
AATAAATGGAGTATCCTG

WO 2004/030615

PCT/US2003/028547

3219/6881
FIGURE 2971

GCAGCAGGCCAAGGGGGAGGTGCGAGCGTGGACCTGGGACGGGTCTGGGCGGCTCTCGGTGGTTGGCACGGGGTTC
GCACACCCATTCAAGCGGCAGGACGCACTTGTCTTAGCAGTTCTCGCTGACCGCGCTAGCTGCGGGCTTCTACGCT
CCGGCACTCTGAGTTTCATCAGCAAACGCCCTGGCGTCTGTCTCACCATGCCCTAGCCTTTGGGACCGCTTCTCGT
CGTCGTCCACCTCCTCTTTCGCCCTCGTCCTTGCCCCGAACCCCCACCCAGATCGGGCCCGCGCTCAGCCTGGG
GGTGGGCGACCGGGAGGAGGGGTTTGACCGCTCCACGAGCCTGGAGAGCTCGGACTGCGAGTCCCTGGACAGCA
GCAACAGTGGCTTCGGGCCGGAGGAAGACACGGCTTACCTGGATGGGGTGTCTGTTGCCCCGACTTCGAGCTGCTCA
GTGACCCTGAGGATGAACACTTGTGTGCCAACCTGATGCAGCTGCTGCAGGAGAGCCTGGCCCAGGCGCGGGCTGG
GCTCTCGACGCCCTGCGCGCCTGCTGATGCCTAGCCAGTTGGTAAGCCAGGTGGGCAAAGAACTACTGCGCCTGG
CCTACAGCGAGCCGTGCGGCCTGCGGGGGGCGCTGCTGGACGTCTGCGTGGAGCAGGGCAAGAGCTGCCACAGCG
TGGGCCAGCTGGCACTCGACCCAGCCTGGTGCCACCTTCCAGCTGACCCTCGTGCTGCGCCTGGACTCACGAC
TCTGGCCCAAGATCCAGGGGCTGTTTAGCTCCGCCAACTCTCCCTTCTCCCTGGCTTCAGCCAGTCCCTGACGC
TGAGCACTGGCTTCCGAGTCATCAAGAAGAAGCTGTACAGCTCGGAACAGCTGCTCATTGAGGAGTGTTGAACTT
CAACCTGAGGGGGCCGACAGTGCCCTCCAAGACAGAGACGACTGAACTTTTGGGGTGGAGACTAGAGGCAGGAGC
TGAGGGACTGATTCCAGTGGTTGGAAAAGTGAAGGCAGCCACCTAAGGTGGAGGTGGGGGAATAGTGTTCACAGG
AAGCTCATTGAGTTGTGTGCGGGTGGCTGTGCATTGGGGACACATACCCCTCAGTACTGTAGCATGGAACAAAGG
CTTAGGGGCCAACAAGGCTTCCAGCTGGATGTGTGTGTAGCATGTACCTTATTATTTTGTACTGACAGTTAAC
AGTGGTGTGACATCCAGAGAGCAGCTGGGCTGCTCCCGCCCCAGCCTGGCCCAGGGTGAAGGAAGAGGCACGTGC
TCCTCAGAGCAGCCGGAGGGAGGGGGAGGTGCGAGGTGCTGGAGGTGGTTTGTGTATCTTACTGGTCTGAAGGG
ACCAAGTGTGTTTGTGTTGTTTGTGTTTGTATCTTGTTTTCTGATCGGAGCATCACTACTGACCTGTTGTAGGCAGC
TATCTTACAGACGCATGAATGTAAGAGTAGGAAGGGTGGGTGTGAGGATCACTTGGGATCTTTGACACTTGAA
AAATTACACCTGGCAGCTGCGTTTAAGCCTTCCCCATCGTGTACTGCAGAGTTGAGCTGGCAGGGGAGGGGCTG
AGAGGGTGGGGGCTGGAACCCCTCCCCGGGAGGAGTGCCATCTGGGTCTTCCATCTAGAACTGTTTACATGAAGA
TAAGATACTCACTGTTTATGAATACACTTGATGTTCAAGTATTAAGACCTATGCAATATTTTTTACTTTTCTAAT
AAACATGTTTGTGTTAAACAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3220/6881
FIGURE 2972

MPSLWDRFSSSSSTSSSPSSLPRTPDRPPRSAWGSATREEGFDRSTSLESSDCESLDSSNSGFGPEEDTAYLDG
VSLPDFELLSDPEDEHLCANLMQLLQESLAQARLGSRPARLLMPSQLVSQVGKELLRLAYSEPCGLRGALLDVC
VEQGKSCHSVGQLALDPSLVPTFQLTLVLRDLSRLWPKIQGLFSSANSFPLPGFSQSLTLSTGFRVIKKKLYSSE
QLLIEEC

WO 2004/030615

PCT/US2003/028547

3221/6881
FIGURE 2973

CGCATTGCAGACTGCGGAGTCAGACGGCGCTATGTACGCCCTCTTCTCTCTGCCCAGCCTCTCTGGGCGCGGCTCT
AGCCGGCCCCGGTCCTTGGACTGAAAGAATGCACCAGGGGCTCGGCAGTGTGGTGCCAGAATGTGAAGACGGCGTC
CGACTGCGGGGAGTGAAGCACTGCCTGCAGACCGTTTGAACAAGCCAACAGTGAAATCCCTTCCCTGCGACAT
ATGCAAAGACGTTGTACCCGAGCTGGTGATATGCTGAAGGACAATGCCACTGAGGAGGAGATCCTTGTTTACTT
GGAGAAGACCTGTGACTGGCTTCCGAAACCGAACATGTCTGCTTCATGCAAGGAGATAGTGGACTCCTACCTCCC
TGTCATCCTGGACATCATTAAAGGAGAAATGAGCCGTCCTGGGGAGGTGTGCTCTGCTCTCAACCTCTGCGAGTC
TCTCCAGAAGCACCTAGCAGAGCTGAATCACCAGAAGCAGCTGGAGTCCAATAAGATCCCAGAGCTGGACATGAC
TGAGGTGGTGGCCCCCTTCATGGCCAACATCCCTCTCTCTCTACCTCAGGACGGCCCCCGCAGCAAGCCCCA
GCCAAAGGATAATGGGGACGTTTGGCAGGACTGCATTGAGATGGTGAAGTACATCCAGACTGCTGTACGGACCAA
CTCCACCTTTGTCCAGGCCTTGGTGGAACATGTCAAGGAGGAGTGTGACCGCCTGGGCGCTGGCATGGCCGACAT
ATGCAAGAACTATATCAGCCAGTATTCTGAAATTGCTATCCAGATGATGATGCACATGCAACCCAAGGAGATCTG
TGCGCTGGTTGGGTTCTGTGATGAGGTGAAAGAGATGCCCATGCAGACTCTGGTCCCCGCCAAAGTGGCCTCCAA
GAATGTCATCCCTGCCCTGGAAGTGGTGGAGCCATTAAAGAAGCAGAGGTCCCAGCAAAGTCTGATGTTTACTG
TGAGGTGTGTGAATTCCTGGTGAAGGAGGTGACCAAGCTGATTGACAACAACAAGACTGAGAAAAGAAATACTCGA
CGCTTTTGAACAAATGTGCTCGAAGCTGCCGAAGTCCCTGTGCGAAGAGTGCCAGGAGGTGGTGGACACGTACGG
CAGCTCCATCCTGTCCATCCTGCTGGAGGAGGTGAGCCCTGAGCTGGTGTGCAGCATGCTGCACCTCTGCTCTGG
CACGCGGCTGCCTGCAGTACCGTTACGTGACTCAGCCAAAGGACGGTGGCTTCTGCGAAGTGTGCAAGAAGCT
GGTGGGTTATTTGGATCGCAACCTGGAGAAAAACAGCACCAAGCAGGAGATCCTGGCTGCTCTTGAGAAAGGCTG
CAGCTTCTGCCAGACCCCTTACCAGAAGCAGTGTGATCAGTTTGTGGCAGAGTACGAGCCCGTGTGATCGAGAT
CCTGGTGGAGGTGATGGATCCTTCTCTGCTGTGCTTGAAATTGGAGCCTGCCCTCGGCCCCATAAGCCCTTGTT
GGGAAGTGAAGTGTATATGGGGCCCCAAGCTACTGGTGCCAGAACACAGAGACAGCAGCCAGTGCAATGCTGT
CGAGCATTGCAAACGCCATGTGTGGAAGTAGGAGGAGGAATATTCCATCTTGGCAGAAACCACAGCATTGGTTTT
TTTCTACTTGTGTGTCTGGGGGAATGAACGCACAGATCTGTTTGACTTTGTTATAAAAAATAGGGCTCCCCACCT
CCCCATTTCTGTGTCTTTATTGTAGCATTGCTGTCTGCAAGGGAGCCCTAGCCCTGGCAGACATAGCTGCT
TCAGTGCCCTTTTCTCTCTGCTAGATGGATGTTGATGCACTGGAGGTCTTTTAGCCTGCCCTTGATGGCGCCT
GCTGGAGGAGGAGAGAGCTCTGCTGGCATGAGCCACAGTTTCTTGACTGGAGGCCATCAACCCTCTTGGTTGAGG
CCTTGTCTGAGCCCTGACATGTGCTTGGGCACTGGTGGGCTGGGCTTCTGAGGTGGCCTCCTGCCCTGATCAG
GGACCTCCCCGCTTCTCTGGGCTCTCAGTTGAACAAAGCAGCAAAACAAAGGCAGTTTTATATGAAAGATTAG
AAGCCTGGAATAATCAGGCTTTTTAAATGATGTAATCCCAGTGAATAGCATAGGGATTTTGAAGCAGCTGCT
GGTGGCTTGGGACATCAGTGGGGCCAAGGGTTCTCTGTCCCTGGTTCAACTGTGATTTGGCTTTCCCGTGTCTTT
CCTGGTGTGCTTGTGTTGGGGTTCTGTGGGTTTGGGTGGGAAGAGGGCCATCTGCCTGAATGTAACCTGCTAGC
TCTCCGAAGGCCCTGCGGGCTGGCTTGTGTGAGCGTGTGGACAGTGGTGGCCGCGCTGTGCCTGCTCGTGTGTC
CTACATGTCCCTGGCTGTTGAGGCGCTGCTTCAGCCTGCACCCCTCCCTTGTCTCATAGATGCTCCTTTTGACCT
TTTCAAATAAATATGGATGGCGAGCTCCTAGGCCTCTGGCTTCTGGTAGAGGGCGGCATGCCGAAGGGTCTGCT
GGGTGTGGATTGGATGCTGGGGTGTGGGGTTGGAAGCTGTCTGTGGCCCACTTGGGCACCCACGCTTCTGTCCA
CTTCTGGTTGCCAGGAGACAGCAAGCAAAGCCAGGACATGAAGTTGCTATTAAATGGACTTCGTGATTTTTG
TTTTGCACTAAAGTTTCTGTGATTTAACAATAAAATCTGTAGCC

WO 2004/030615

PCT/US2003/028547

3222/6881
FIGURE 2974

MYALFLLASLLGAALAGPVLGLKECTRGSAVWCQNVKTASDCGAVKHCLQTVWNKPTVKSILPCDICKDVVTAAGD
MLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDI IKGEMSRPGEVCSALNLCESLQKHLAELNH
QKQLESNKIPELDMTEVVAPFMANIPLLLYPQDGPRSKPQPKDNGDVCQDCIQMVTDIQTAVRTNSTFVQALVEH
VKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCDEVKEMPMQTLVPAKVASKNVIPALELVE
PIKKHEVPAKSDVYCEVCEFLVKEVTKLIDNNKTEKEILDADFDMCSKLPKSLSEECQEVVDITYGSSILSILLEE
VSPELVCSMLHLCSGTRLPALTVHVTQPKDGGFCEVCKKLVGYLDRNLEKNSTKQEILAALEKGCFLPDYPYQKQ
CDQFVAEYEPVLEILVEVMDPSFVCLKIGACPSAHKPLLGTCKIWGSPSYWCQNTETAAQCNAVEHCKRHVWN

WO 2004/030615

PCT/US2003/028547

3223/6881
FIGURE 2975

GTGTCTTTTCCTGGTGATGCCTTGTTTGGGGTTCTGTGGGTTTGGGTGGGAAGAGGGCCATCTGCCTGAATGTAAC
CTGCTAGCTCTCCGAAGGCCCTGCGGGCCTGGCTTGTTGTGAGCGTGTGGACAGTGGTGGCCGCGCTGTGCCTGCT
CGTGTTGCCTACATGTCCCTGGCTGTTGAGGCGCTGCTTCAGCGCACCCACGCTTCTGTCCACTTCTGGTTGCCA
GGAGACAGCAAGCAAAGCCAGCAGGACATGAAGTTGCTATTAAATGGACTTCGTGATTTTGTGTTTGCCTAAAG
TTTCTGTGATTTAACAATAAAATTCTGTTAGCCAG

WO 2004/030615

PCT/US2003/028547

3224/6881
FIGURE 2976

AGACTAAAGACATTAAAGAGATAGCCAAAAAGACACAAGCCCTGCCAAAGATGAACTCAAAGAGGCAGCGAATCG
TGATCTTCACCCAAGGGAGAGATGACACTATAATGGCTACAGAAAGTGAAGTCACTGCTTTTGCTGTCTTGGATC
AAGACCAGAAAGAAATTATTGATACCAATGGAGCTGGAGATGCATTTGTTGGAGGTTTTCTGTCTCAACTGGTCT
CTGACAAGCCTCTGACTGAATGTATCCGTGCTGGCCACTATGCAGCAAGCATCATAATTAGACGGACTGGCTGCA
CCTTTCCTGAGAAGCCAGACTTCCACTGATGGAAGAGCTGAAAACACAAGCCCAGGAGTGCAGACACTGCCCTAA
TTGCTTCCTGAGAATTCCTATATTAATAAAGAAGAAATTATCTGCCATTTTTCTACTATAATAATGCTGAAT
CTTAATTTAGAGGGTACAAGGGTATGGTAATGCTTGTAGAATCTTTATTATCTCAACAATCTAAAAAATGATGTT
TATTTCCATAGTTTGATAGTGCCACTTAAATGCCAATTAAACAAGAATATAACATTTCAATAGAAATTTTTATTT
CATTTTCAATTACTTTGTAAATTCGTGTGTATTTAGTACACTGATTTGTTTTTTTACATTTCTGCTTTGAATGCA
GATGCAATTTAATATAATAGATTTTTTAATGAATTAATCTTAACATAGTAATCTTTAGCTTTTTATACAAATATA
TTTAATTTAGGAGTATATGTGTGTCTATACACACACATACATAAATATACCACATATACACCTGATAGTCAAATA
AGGTACAGAAATTTTATCTTGTCAATTATGCCAAATAATCTCTTAATGTGCACTCAAACATGTAATAAACTTTG
GATAATT

WO 2004/030615

PCT/US2003/028547

3225/6881
FIGURE 2977

AGCCTGAACCTCTAGGACTTTTAATTGATACCAAGTGGTCTCCGCTCTGAAACAGTCCACCAGAATGAGGGTACCA
AACTGACCTCAGAGGTTTCCAGGTTTGATGAACTTGTGAAAAAATTCAAAGTCGAATATCATGCTGGTGGCTCTA
CCCAGAATTCAATTAAAGTGGCTCAGAATCTGGAGAGCCTGTCTTGTTTGCCCGACAGATACCCCTCTTCCAGC
AGATCTCTGCACAGAATTATTTTCAGACCACAGCAAGAAGGGTCAGAGCTGAGAATGGACCACCTGAGGATCTGC
TGTGGGATGGAGCAGGAACCTGCTTAGGTGGTACCAATCTTGACTTCCAGATGGAACAGTACATCTCTATAAGGA
AAAGTGATGGCATCCACATCGTAAATCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTTGTGCCATTGTTG
CCATTGAAAACCTGCTGATGTCAGTGTTATATCCTCCAGGAATATTGGCCAAAGGGCTGTGCTGAAGTTTGCTG
CTGCCACTGGAGCCACTCCAATTGTTGGCCACTTCACTCCTGGAACCTTCACTAACACATCCAGGCAGCCTTCC
AAGAGCCACGGCTTCTTGTGGTTACTGACCCAGGGCTGACCACCAGCCTCTCACAGAGGCATCTTACGTTAACC
TATCTACCGTTGCTTTTGTGTAACACAGATTCTCCTCTGCACTTTGTGGACATTGCCATTCTATGCAACAATAAGG
GAGCTCACTCAATGGGTTTGATGTGGTGGATGCCAGCCCGGAAGGTTTGC GCGCGTGTGGCACCATTTCCTCATG
AACACCCATGGGAATTCATGCCTGATCTCTACAGAGATCCTAAAGAGACTGAAAAAGCAGAGCAGCCTGCTGCTG
AAAAGGCTGTGACCAAGGAGGAATTTAGGGTGAATGGACTGCTCCAGCTCCTGAGTTAACTGCTACTCAGCCTG
AGGTTGCAGACTGGTCTGAAGGTGTGCAGGTGCCCTCTGCGCCTATTTCATCAGTTCCCTACTGAAGACTGGAGTG
CTGAGCCTGCCACGGAAGGCTGGTCCACAGCTCCCAATGCTCAGGCCATTGAATGGTGGATGATTCAACAGCCAC
ACAAAGCAGCAACATTTTTTGGATGCATTGGGATAGATAAATTTGGGGAGATCCTGAAGAGAAAAGCTGCTGAAG
CCCATGTGGATGCTCATTACTACGAGCAGAATGAGCAGCCAACAGGAACCTTGTGCTGCATGCATCACTGGTGACA
ACAGGTCCCTCATAGCTAATCTTGCTGCTGCCAATTGTTATAAAAAGGAAAAACATCTTGATCTGGAGAAAACT
GGATGTTGGTAGAAAAAGCAAGAGTTTGTATATAGCAGGTGTGATAAAGCATATTACTAGAAAAGCATCAATCG
GTCTTTCAGGTACAATACCAGAGGAACCATCACAGTTTATTTACCTTTCAGAAGCTTTAAAAATAAAGTTACATG
ATGCCTCTGCTCTCCAGATTTCTAATCAAACCTGGAACAAAAGAGCCAAGCACATTCTATCTGA

WO 2004/030615

PCT/US2003/028547

3226/6881
FIGURE 2978

CTTTTCCTCCTTGGCTGTCTGAAGATAGATCGCCATCATGAACGACACCGTAACTATCCGCACTAGAAAAGTTCAT
GACCAACCGACTACTTCAGAGGAAACAAATGGTCATTGATGTCCTTCACCCCGGGAAGGCGACAGTGCCTAAGAC
AGAAATTCGGGAAAACTAGCCAAATGTACAAGACCACACCGGATGTCATCTTTGTATTTGGATTTCAGAACTCA
TTTTGGTGGTGGCAAGACAAC TGGCTTTGGCATGATTTATGATTCCCTGGATTATGCAAAGAAAAATGAACCCAA
ACATAGACTTGCAAGACATGGCCTGTATGAGAAGAAAAAGACCTCAAGAAAGCAACGAAAGGAACGCAAGAACAG
AATGAAGAAAGTCAGGGGGACTGCAAAGGCCAATGTTGGTGTGGCAAAAAGTGAGCTGGAGATTGGATCACAGC
CGAAGGAGTAAAGGTGCTGCAATGATGTTAGCTGTGGCCACTGTGGATTTTTCGCAAGAACATTAATAAACTAAA
AACTTCATGTGT

WO 2004/030615

PCT/US2003/028547

3227/6881
FIGURE 2979

MNDTVTIRTRKFMTNRLLRKQMVVIDVLHPGKATVPKTEIREKLAKMYKTPDVIFVFGFRTHFGGGKTTGFGMI
YDSL DYAKKNEPKHRLARHGLYEKKKTSRKQRKERKNRMKKVRGTAKANVGAGKK

WO 2004/030615

PCT/US2003/028547

3228/6881
FIGURE 2980

CTTTTCCTCCTTGGCTGTCTGAAGATAGATCGCCATCATGAACGACACCGTAACTATCCGCACTAGAAAAGTTCAT
GACCAACCGACTACTTCAGAGGAAACAAATGGTCATTGATGTCCTTCACCCCGGGAAGGCGACAGTGCCTAAGAC
AGAAATTCGGGAAAAACTAGCCAAAATGTACAAGACCACACCGGATGTCATCTTTGTATTTGGATTTCAGAACTCA
TTTTGGTGGTGGCAAGACAACCTGGCTTTGGCATGATTTATGATTCCCTGGATTATGCAAAGAAAAATGAACCCAA
ACATAGACTTGCAAGACATGGCCTGTATGAGAAGAAAAAGACCTCAAGAAAGCAACGAAAGGAACGCAAGAACAG
AATGAAGAAAGTCAGGGGGACTGCAAAGGCCAATGTTGGTGCTGGCAAAAAGCCGAAGGAGTAAAGGTGCTGCAA
TGATGTTAGCTGTGGCCACTGTGGATTTTTCGCAAGAACATTAATAAACTAAAAACTTCATGTGT

WO 2004/030615

PCT/US2003/028547

3229/6881
FIGURE 2981

MNDTVTIRTRKFMTNRLQLQRKQMVLDVLHPGKATVPKTEIREKLAKMYKTPDVIFVFGFRTHFGGKTTGFGMI
YDSL DYAKKNEPKHRLARHGLYEKKKTSRKQRKERKNRMKKVRGTAKANVGAGKKPKE

WO 2004/030615

PCT/US2003/028547

3230/6881
FIGURE 2982

GCTGCAGCTGCAGCAGCTGGAGGGCGAAGTGAAGGAGACACCGTTCCGCCCGGGCCTCGCCATGGCGACCCACG
GACAGACTTGCGCGCGTCCAATGTGTATTCCCTCCATCATATGCTGACCTTGGCAAAGTTGCCAGAGATAATTTCA
ACAAAGGATTTGGTTTTGGGTTGGTGAAACTGGATGTGAAAACAAAGTCTTGCACTGGCGTGGAATTTCAACGT
CCGGTTCATCTAATACAGACACTGGTAAAGTTACTGGGACCTTGGAGACCAAATACAAGTGGTGTGAGTATGGTC
TGACTTTTACAGAAAAGTGGAACACTGATAACACTCTGGGAACAGAAATCGCAATTGAAGACCAGATTTGTCAAG
GTTTGAAACTGACATTTGATACTACCTTCTCACCAAACACAGGAAAGAAAAGTGGTAAAATCAAGTCTTCTTACA
AGAGGGAGTGTATAAACCTTGGTTGTGATGTTGACTTTGATTTTGCTGGACCTGCAATCCATGGTTCAGCTGTCT
TTGGTTATGAGGGCTGGCTTGCTGGCTACCAGATGACCTTTGACAGTGCCAAATCAAAGCTGACAAGGAATAACT
TTGCAGTGGGCTACAGGACTGGGGACTTCCAGCTACACACTAATGTCAATGATGGGACAGAATTTGGAGGATCAA
TTTATCAGAAAGTTTGTGAAGATCTTGACACTTCAGTAAACCTTGCTTGGACATCAGGTACCAACTGCACTCGTT
TTGGCATTGCAGCTAAATATCAGTTGGATCCCACTGCTTCCATTTCTGCAAAAGTCAACAACCTCTAGCTTAATTG
GAGTAGGCTATACTCAGACTCTGAGGCCTGGTGTGAAGCTTACACTCTCTGCTCTGGTAGATGGGAAGAGCATT
ATGCTGGAGGCCACAAGGTTGGGCTCGCCCTGGAGTTGGAGGCTTAATCCAGCTGAAAGAAACCTTTGGGAATGG
ATATCAGAAGATTTGGCCTTAATATATTTCCATTGTGACCAGCAGCAGGCTTTTTTCCCCCAAGAAGATGATCAA
AACAAAGGATGATCTCAACAAGAGCTGTATTTTAAGTATTTAGACAGTTCTTTGTTAGCTGGTTTCTAGTTGGTT
ATCTAGTTACCAATGCTGCAGTCCTGCAGTCACCTATACATTATTTAAATGTATTTAACTGTTAAATGCGCTACC
CACCAATAATGAAATAGACCTTTATGAAAACGTGCAATTGTGTGCATGTTTGTGTTTTATGTTTCTTTAGAAAAC
ATTGACTGTTACCATTGAATGAGATGGATCAGTGGATATTAAGATGAGGTTACAAATTTTGTTAAGTTCAGCCAT
TATTACTTTTGGTATCCCAGAACATGACAAATTATGAATAAAACAAGTATACAT

WO 2004/030615

PCT/US2003/028547

3231/6881
FIGURE 2983

MATHGQTCARPMCIPPSYADLGKVARDIFNKGFGFGLVKLDVKTCSGVEFSTSGSSNTDTGKVTGTLET KYKW
CEYGLTFTEKWNTDNTLGTEIAIEDQICQGLKLTFTTFSPNTGKKSGKIKSSYKRECINLGCDVDFDFAGPAIH
GSAVFGYEGWLAGYQMTFDSA SKLTRNNFAVG YRTGDFQLHTNVNDGTEFGGSIYQKVCEDLDTSVNLAWTSGT
NCTRF GIAAKYQLDPTASISAKVNNSSLIGVGYTQTLRPGVKLTLSALVDGKSINAGGHKVGLALELEA

WO 2004/030615

PCT/US2003/028547

3232/6881
FIGURE 2984A

AGCCTTGTTGTCCTCCTGGTGCGAAGAGCTCGGCCGCTGCTGCTGCTCCGACATCAGAAGAGCCGCCAGAGCGA
TCCCCCTGGGAAACTCCCCATGCAGCCCCCTCTCAGCTCCATGAGCTCCATGAAACCCACTCTGTGCGACAGTGA
TGGGTGCTTCCCCTATGACTCTGTCCCTTGGCAGCAGAACACCAACCAGCCTCCCGGCTCCCTTTCGTGGTCAC
CACGGTTTGGGGAGTAACCAACACATCCCAGAGCCAGGTCCTTGGGAACCCATGGCCAATGCCAACACCCCAT
GAATCCAGGCGGCAACCCCATGGCGTCGGGCATGACCACCAGCAACCCAGGCCTCAACTCCCCACAGTTTGCGGG
GCAGCAGCAGCAGTTCTCAGCCAAGGCTGGCCCCGCTCAGCCCTACATCCAGCAGAGCATGTATGGCCGGCCCAA
CTACCCCGGCAGCGGGGGCTTTGGGGCCAGTTACCCTGGGGGTCTTAACGCCCCCGCAGGCATGGGCATCCCTCC
GCACACCAGGCCGCTGCTGACTTCACTCAGCCCCGCGGCAGCCGCTGCAGCAGCGGCAGTGGCAGCAGCAGCAGC
CACAGCTACAGCCACAGCCACGGCCACTGTGGCAGCCCTGCAGGAGACACAGAACAAGGATATAAACAGTATGG
ACCGGTCTGTTCTCTTTCCAGATGGGTCCACCCAGGCGTATAACAGCCAATTCATGAACCAGCCCCGGCCGCG
GGGGCTGCCTCCATGGGGGGCAGCATGAACCCGCGAGCATGGCGGCTGGCATGACGCCCTCGGGGATGAGCGG
CCCTCCCATGGGCATGAACCAGCCCCGGCCGCGCCGGCATCAGCCCTTTGGCACACAGGGCAGCGGATGCCCA
GCAGACCTACCCGGGCCCGGGCCCCAGTCCCTTCTATTAGAACATAAAGAGGCCATACCTGGAGAGGTGAG
TGCAGCAGTGGGAGCCTGGGAGGTGGGAAGTGGGACACCTGGGCTTGAAGACATGGGCCGTGGGTACGGCTTTGG
AAGGGGTGTGGCTTGGACTCCAGCACACTTGGACAAAGAGGCAGGGGCTTAGGGGTGAGGTGCTCCTGGGTTTGA
GACCTGGTTCTGCTGTTTTCCCAACTGAAAGACCTCGAGCCAGTCACCCTGCCTCCTAGGGCTGCTTGAGGGACTT
GAGGAGGTGTCCGTGAAGTGCTTGGCCCTGGGCTGGCATGTGCCGCCACTCAGCAAGCAGCAGTTCCTCTTACTG
TAGTGACTCTTGTCTTGGCTCAGCCACTAAGTGGGTGACCTGGGTTTAGTTCCTCCTGCCACATGAGAGCTTCC
CCAACCTCCTCTCCAAGAAAGAGAGCTGAGACAAAATGCTTCCAGTCTATAAGGGCTGACCCGTCCGGGAAGTGAC
TGGAAAGGCAGGCAGCGTGTTCAGTCTGTAAGGATTGACCTGTTGGGGAAGTGAAGTGGAAAGGCAGAGAGCGTGT
TTCCAATCTATAAGGACTGACCCGTTGGGGAAGTGAAGTGGAAAGGCCGCGCAGCTGTTTCCAGTCTATAAGGACTGA
CCCGTCAGGGAAGTGAAGTGGAAAGGCAGACAGCGTGTTCCTTAGCTCTTGTTTCCATCCACACTTGGTCACTGTAT
AGGAAGTGGCACTGCCTCTTGGGCTGCACAGCCAGCTCAGCCAAGGTGTTGGGGAAGATTGGGGGAAGTAAACC
CACACCTCCTGCCCTCTGGGAAGTGAGGTTTTAGCAGGAAAGAAAAGTTTTAGCAGAGACTCACCAGGGAATGA
AGCATAGCAGACTGCACAGAAGTCAATATGAGTCAGAGAAGGCAGGCTTCTGGAGGGTGTGTACAAAGTAAATC
CTCAGAAAATGATGCTGGCAGCAGCTGGCCCATCTGGGTACCCAGGTAAGGATTTAGTTTACCTGCAGAAAGACGT
AGGGACGTGGCTCTGCAGATGCCCCCTCGTGAAGCCCTGGTTGCTCCCCACGACCAAGCCCCTTTTTGAGCAGGGT
GTGCCAGCTCTCTGCCTGCCTCCCTCCCAGCTTGCATGCCCACTCTCAGAGCAGTTTTCTCCTCCTAGCTCCTC
TCAGCTCTGTGGCCTTACCTTGGGTTTACAGCGGCTTTAGATTCCAAAGACCTTAAGTTCCCTTGAAGATCTGCA
CATTTCCCCTCAGTATCCACCTTAGGATGGGCGGGGAGGCTTGGCAACAAGTGGAGGTATTCTGAGTTCAGGAGG
GGAGAGAGAGGGGGGGGGGGTCAAGGGCTTCCCTCATGCATCCAAGAAGCTGGATCAAGCCCCAACCTCCACCTGG
TGGACACTAGTTTCAAGGAGGGGGCCAGAGAAGGACCATTTGGCTCCTGGGTCTGAGTTTGGGGGAGCCTCAAGCTA
TTGGCACCTCTCCTGGCACTCAGGCCCATGCAGTTTCTAGGCCTTTTCTCAGCCACCTGTGCTCAAAATCCCA
GTGTCCCACTGGCTGTGCTGGGGGTGCATCTGTTAGCCACGCCAAAGGAGGCAATCTCGGATGAGGCTTCAGCA
GAATTCCTGGTCATTGGTGTACCCCTGCACCTGCACCTGTGCCATGCTTATGGCTCTTGCTGCCTAAAGAGAG
CACACCAAAGGCTCTCCATATTTTTACTAAATTAATCATCCTTTTCATAGAGTGCTGCTGTACCCAGCTACAGC
ACTGGGTGGTCACAGCCTATGCGGCCTGATCCTGTCTGGAAGACTGGCCTTCCCTCCCTTGCCATGGCTTGTTT
ATACAATATTTGAATTGTTGGAGCCTTAGGACAGGGGTGGGTCACTGGTCCACAGAGGACTCTCTTCTCTAG
CTTGGTGGGCAGGTAGGCACAGCTACGTCTTCTATACCTCCTGTGGTGGGTGCCTCACTGTACCCAGAGCAGC
CACCATGTTGCAACAACGTGAGTTGTAGATTCTTCCACACTGACACTTCTGACATTTATCCCTAAGTCCATCAT
TCGTTTGTGTGAGCAAGTATTAAGGGTATTTTCCAGGCACTGGGGCACAGCCACCAACAGGACCTCTGGGCAAGA
GAGACACTCAGATGGGGAAGAAGAAACCACTGACTCACAGGATGTATGTGGCCGTGAGGGTCACCTGATTTTCC
AGACAGGGAAGGTGGCTGGAGGGTGGTGTCTCTCCTCTTCTCTAAATTGTCTGTCCCGGAGAAAGTTGTCTTGT
TCCTTACCAACCTGGCTCTCCACCTCCTGCACAGGTGGCAGGTTGTGATGGCCAGAACTGAACACTAGGTG
TGTGTTCTGCTCTGAGGGGAGTACGAGGACAATGCCACCAAGTTAGCCTTGGAAATGCAGGGGCACAGGGGGCT
CCTTTCTGGAATTGCATCCTGTTGACTGTGTTCTCTGTACATTGGGGTACACATTGGGGAGCACAGCCCCAAC
CCAGGCACAGGAGAGACACAAAGGTGGGGGAGTTAGAATCAGGCCCTCATAATGGTGTGAGCAAGAGGCTCT
GAAAGTGTCCCTGGAGTTCAGGGGCACATGTGCTCCAGGAAGAAGCCCTCAAGGGGAGGTGGCCTATGATCTGG

WO 2004/030615

PCT/US2003/028547

3233/6881

FIGURE 2984B

ACAGGCAGAACAAAATGCCCTGGATGTCAGGACGAGAAGGGGCCCAAAGCATTATCTGGTTTTGTGGGTGGGAA
ACAGCAGGAGCAAATGAGGAGAGGCGGGCCCCATCCCGTTGTTTCAGGTGACCTGGCTATGTGACGTTGGCAACAT
TGAACGTGTTCCCCTCTCCTTTCTCTCCACACAGCCCAACTATGGAAACCAGCAATATGGACCAAACAGCCAG
TTCCCCACCCAGCCAGGCCAGTACCCAGCCCCCAACCCCCGAGGCCACTCACCTCCCCCAACTACCCAGGACAG
AGGATGCCCAGCCAGCCGAGCTCCGGGCAGTACCGCCCCCACGGTCAACATGGGGCAGTATTACAAGGTGAGT
CCCAGCCTCGCCACCACCCACGGGGCCCCCTTCCTCCTAACCACCTCACTCCCCTAACTCCACCGGGATCACTCT
GACCCCTGCGTGTTTGTCCCAAGGACAGCGAGGGGTGGGTGATTTCTGAACGTCCCCATGTGTTTCAGGGCGAAG
TTCGGTGGCCAGAAATGTCAGAGTGGCTTTTCTCAGTTCCTATTCTCATTCGTCTCGGATGATGGTTTTTTTTTCT
CCTTTTCTTATTCACGGCACTCACAAAATAATAAAGGAAATATATTTTATT

WO 2004/030615

PCT/US2003/028547

3234/6881
FIGURE 2985

MNSMDRHIQQTNDRQLQCIKQHLQNPANFHNAATELLDWCGRPRAFQRPFESLMGCLTVVSRVAAQQGFDDLGLGY
RLLA VCAANRDKFTPKSAALLSSWCEELGRLLLLLRHQKSRQSDPPGKLPMQFPLSSMSSMKPTLSHSDGSFPYDS
VPWQQNTNQPPGSLSVVTTVWGVNTNTSQSQVLGNPMANANNPMNPGGNPMASGMTTSNPGLNSPQFAGQQQQFSA
KAGPAQPYIQQSMYGRPNYPGSGGFGASYPGGPNAPAGMGIPPHTRPPADFTQPAAAAAAAAAVAAAAATATATAT
ATVAALQETQNKDINQYGPVCSSFQMGPTQAYNSQFMNQPGPRGPASMGGSMPASMAAGMTFSGMSGPPMGMNQ
PRPPGISPFGTHGQRMPPQQTYPGPRPQSLPIQNIKRFPYPGEVSAAVGAWEVGTGTPGLEDMGRGYGFGRGVAWTP
AHL DKEAGA

WO 2004/030615

PCT/US2003/028547

3235/6881
FIGURE 2986

TCTGGGCGCGCGCGACGTCAAGTTTGTGTTCTCCCCGCCCCTGTCCCGCCCGACCCGCGCCCGCGATGC
TGGCGCTGCGCTGCGGCTCCCGCTGGCTCGGCCTGCTCTCCGTCCCGCGCTCCGTGCCGCTGCGCCTCCCCGCGG
CCCGCGCCTGCAGCAAGGGCTCCGGCGACCCGTCTCTTCTCCTCCTCCGGGAACCCGCTCGTGTACCTGGACG
TGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA
ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT
TCATGTGCCAGGCGGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG
ACGAGAACTTTACACTGAAGCACGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCCTAACACCAACGGCT
CCCAGTTCTTCATCTGCACCATAAAGACAGACTGGTTGGATGGCAAGCATGTTGTGTTCCGGTCACGTCAAAGAGG
GCATGGACGTCGTGAAGAAAATAGAATCTTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG
ACTGTGGCCAGTTGAGCTTAACTCTGTGGCCAGGGTGCTGGCATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTG
GCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATACGTGTGCCACTCCACTGTCACAGTGTGCCTGAGGAA
GGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCACATTGCTTCCTAATACCCACCCTTCCTCACGACCTCA
TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCTTGTCAAGCATTGCCTGTGATTGCCAGCCCAGATTC
ATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAG
TCAGTTTGCAAAAGGACTCTAATACCTGTTAATATTGTCTTCCTAATTGGGATAATTTAATTAACAAGATTGA
CTAGAAGTGAACTGCAACACTAACTTCCCCGTGCTGTGGTGACCTGAGTTGGTGACACAGGCCACAGACCCC
AGAGCTTGGCTTTTGAAACACAACCTCAGGGCTTTTGTGAAGGTTCCCCCGCTGAGATCTTTCTCCTGGTTACTG
TGAAGCCTGTTGGTTGCTGCTGTCGTTTTTGAGGAGGGCCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAA
CCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC
GGAGGGAAGCATTTCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCATCTACTCATGATGTGTTATG
CATAAAACATTTCTGGAACATGGATTTGTGTTACCTTAAATGTGAAAATAAATCCTATTTTCTATGGAAAAAA
AAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3236/6881
FIGURE 2987

MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADVVPKTA
ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPVLSMANAGPNTN
GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS

WO 2004/030615

PCT/US2003/028547

3237/6881
FIGURE 2988

ATGAGGAGCAGGAGCACACGTCCAGAACCAAAGCAGAGCGGTGTCCACGCCACTGCAAGCAGCAGGTCCAGATCC
CACATTCCCACAGGAGCCATGGCAAAGGCCTGTGAGCCTGGGGCAGCTCCACCCCAAGAATCAGGGTCCCCAGTG
CACCGGGACTCCGCTCCAAGGAGGAATGCAACCAGTTCCAGGGGGAACGGCCAGTGTGTTGCACGGTGGATGTGC
TCAAGCTCCCGTTTGCTCATCAGCGGGAAACACAGGGTCACAGAGGCACCGCAGGGTGGAGAGAGGCAGGGACTG
GGAATGAAACCACAACTCTCCCAGATGCTGACGTTGCTGCCTCACAGTCACCACAGTCCATGGCCCTGGGCTGC
TGGACTCATGGTGCACCTCAGAGCTATCACTGGAGCCCCTGGCTTTGGGGAGTGCTCTCCTAGATGGCCTAGTCTT
GATAATGATAGTAATGGGGACAGTAATCTGCAGCCCATACCCTCACAACCGCCCTGCAAGCTCCCTGAACAGC
GTGACCTCCCGTCCATCCAGCAGCCTCTTTACGTGTGAGCTGCAGGACCAGCTCCAATGCCCCGAGGACACTCAC
ATGAGGAAGCACGAAAGCGCTTCGGTGTGAGGACTCTGGGGAAGAGGGCGCCTGGAGCCTGCCAGACGAGGGGGG
CCTGAGTTAGGACCAAGGTCTGCGCCTGAGCGGCCTTCACAGGCCCCACCTCTGTCTCATCTGGACAAAGACGT
TGGAAGCCCCGGCCCCACTCGGGCTGCAGCCATCCTGTTCTGTACCAGAGACCCTGTCAGCCTCACAGGCATCT
CCCAAGCCATGGGTGAGGGATGAGTCTCTCAGCGGCCTGGTGGTCCTCAGCGTGCTCAGCAACAGGCTTACCTCC
ATTGGAAGCCATCCCTCAGGCTGGGCACTGACCACCGCCGTCTGGCAGTTTCCGCAATAAGAAAAGCCAAGGGA
GCCTTGAGGCGGGCGAGGTTCCAGCGCGAGGCGGCCGCCCTCAACCGCTCCCAGCGCCAGTTGCGGCGGTTGAT
GGCAGGGAGACGCGCAGCGGAGAGCAAAGGGCGGTGACCCAACGGCCTTCGCTCTCATGGCGTCTTCTTGGTG
TTACCTAAAAATAAAGCCAAGGGTGATCAGAAGCGAGGGACGCTGGCCTTCTCGCGGCTTTCCCCGATATCTCT
CTTTATTCCAGCTGCCTGAAACTCGGTCCCACGAATGGCAGGCAGCGTCCAAAATTCAACCCCGTAAAGCCAGCA
CCAGCCAATAAAGCGCACGGATGGAGGCCACGTGACAGCAGTGGGCGGCCCTCCGGCTGAGCCCTGATCTCTAT
GGTTTCCGCGGCTCGCTAGAAGGAGTGTGGTCCACCGGAGGACTCCCTACATTCTTCTCCTCATTACCTCACTGCC
TCCGGTGGCTGCTGGGATACCGGAGGACTCGGCGCGTCCGGCCCGCCCGCAGGCCAGCTTCTCTCGGGAGCCCCC
ACCCAGGCGCATGGCTCCATGAAGCAAGAGGAGGAGGCAGAGCGCGAGAGGTCCCGTCCGCCCCAGCCGCGTCTG
GGCCAGGATAAAAGAGACCCCCGCGGTCTGGGGCGAGGGTCCGGGGGCAGCCAAAACCATATTCTGTGCTGTGTC
AGTTATGATGCACTGAGAAAACCTTCAGAGACCTAACTTTTTCCAGAGAAGAGAAGCTTTACTGGTGTTCAGCC
CTAAGCATTGACTTCACTAATGGATGTGACCTGGTTGGCAGCAGTAGCTTGACACAACATGCTTGTTTGCAAACCC
TTTGTTCAGAAAACGGCAGATGCTCTGTTGAATCCACTGGAGATTGTTCTGATACTAAGGACAAGTATGCTCAT
ATGACATTAAACAGACAAGACACTTTTCAGAAAGACAGTTGCTAATGGTAATGATGAAAATAATGTCATCATCAGG
TATTATTAGCTATTGGAAGAAACCACTCGGTGTGAGTTTCATCAAGGAATCTGTACAGATGTGA

WO 2004/030615

PCT/US2003/028547

3238/6881
FIGURE 2989

MSRNEINAIQRECKTCNLRILCFRINPPKQGCYLGAWTAGLYYRKLGIVIVADALVSQRHGHGGSNEGALSGPRKH
PGALRRARFQREAGRPQPLPAPVAAVDGRETRSARAKGGDPTAFALMASFLVLPKNKAKGDQKRGTILAFSRLSPD
ISLYSSCLKLGP TNGRQRPKFNPVKPAPANKAHGWRPRDSSGPALRLSPDLYGFRGSLEGVWSTGGLPTFFLHYL
TASGGCWD TGGLGASGPPAGQLLSGAPTQAHGSMKQEEEEAERERSRPPQRLGQDKRDP AVLGRGSGGSQNHIP
AVSYDALRKLQRPKLFPEKRSFTGVPALSIDFTNGCDLVGSSSLHNMLVCKTFVQENGRCSESTGDCSDTKDKY
AHMTLTDKTLFRKTVANGNDENNVIIIRYYLAIGRNHVSSSSRNLSQM

WO 2004/030615

PCT/US2003/028547

3239/6881
FIGURE 2990

GCTGCTGCGCCCGCGGCTCCCCAGTGCCCCGAGTGCCCCGCGGGCCCCGCGAGCGGGAGTGGGACCCAGCCCTAG
GCAGAACCCAGGCGCCGCGCCCGGGACGCCCCGCGGAGAGAGCCACTCCCCGCCACGTCCCATTTCGCCCCCTCGCG
TCCGGAGTCCCCGTGGCCAGATCTAACCATGAGCTACCCTGGCTATCCCCGCCCCCAGGTGGCTACCCACCAGC
TGCACCAGGTGGTGGTCCCTGGGGAGGTGCTGCCTACCCTCCTCGCCCCAGCATGCCCCCATCGGGCTGGATAA
CGTGGCCACCTATGCGGGGAGTTCAACCAGGACTATCTCTCGGGAATGGCGGCCAACATGTCTGGGACATTG
AGGAGCCAACATGCCAACCTGTACCCTGGGGCCCCCTGGGGCTGGCTACCCACCAGTGCCCCCTGGCGGCTTTGG
GCAGCCCCCTCTGCCCAGCAGCCTGTTCTCCCTATGGGATGTATCCACCCCCAGGAGGAAACCCACCCTCCAG
GATGCCCTCATATCCGCCATACCCAGGGGCCCCCTGTGCCGGGCCAGCCCATGCCACCCCCGGACAGCAGCCCCC
AGGGGCCTACCCTGGGCAGCCACCAGTGACCTACCCTGGTCAGCCTCCAGTGCCACTCCCTGGGCAGCAGCAGCC
AGTGCCGAGCTACCCAGGATACCCGGGGTCTGGGACTGTCACCCCCGCTGTGCCCCAACCCAGTTTGAAGCCG
AGGCACCATCACTGATGCTCCCGGCTTTGACCCCCCTGCGAGATGCCGAGGTCTGCGGAAGGCCATGAAAGGCTT
CGGGACGGATGAGCAGGCCATCATTGACTGCCTGGGGAGTCGCTCCAACAAGCAGCGGCAGCAGATCCTACTTTC
CTTCAAGACGGCTTACGGCAAGGATTTGATCAAAGATCTGAAATCTGAACTGTCAGGAAACTTTGAGAAGACAAT
CTTGGCTCTGATGAAGACCCAGTCCTCTTTGACATTTATGAGATAAAGGAAGCCATCAAGGGGGTTGGCACTGA
TGAAGCCTGCCTGATTGAGATCCTCGCTTCCCGCAGCAATGAGCACATCCGAGAATTAAACAGAGCCTACAAAGC
AGAATTCAAAAAGACCCTGGAAGAGGCCATTGGAAGCGACACATCAGGGCACTTCCAGCGGCTCCTCATCTCTCT
CTCTCAGGGAAACCGTGATGAAAGCACAAACGTGGACATGTCACTCGCCCAGAGAGATGCCCAGGAGCTGTATGC
GGCCGGGGAGAACC GCCTGGGAACAGACGAGTCCAAGTTCAATGCGGTTCTGTGCTCCCGAGCCGGGCCACCT
GGTAGCAGTTTTTCAATGAGTACCAGAGAATGACAGGCCGGGACATTGAGAAGAGCATCTGCCGGGAGATGTCCGG
GGACCTGGAGGAGGGCATGCTGGCCGTGGTGAAATGTCTCAAGAATACCCAGCCTTCTTTGCGGAGAGGCTCAA
CAAGGCCATGAGGGGGGCAGGAACAAAGGACCGGACCCTGATTGCGATCATGGTGTCTCGCAGCGAGACCGACCT
CCTGGACATCAGATCAGAGTATAAGCGGATGTACGGCAAGTCGCTGTACCACGACATCTCGGGAGATACTTCAGG
GGATTACCGGAAGATTCTGCTGAAGATCTGTGGTGGCAATGACTGAACAGTGACTGGTGGCTCACTTCTGCCCAC
CTGCCGGCAACACCAGTGCCAGGAAAAGGCCAAAAGAATGTCTGTTTCTAACAAATCCACAAATAGCCCCGAGAT
TCACCGTCCTAGAGCTTAGGCCTGTCTTCCACCCCTCCTGACCCGTATAGTGTGCCACAGGACCTGGGTGCGTCT
AGAACTCTCTCAGGATGCCTTTTCTACCCCATCCCTCACAGCCTCTTGCTGCTAAATAGATGTTTTCATTTTCT
GAAAAAA

WO 2004/030615

PCT/US2003/028547

3240/6881
FIGURE 2991

MSYPGYPPPPGGYPPAAPGGGPWGGAAYPPPPSMPPIGLDNVATYAGQFNQDYLSGMAANMSGTFGGANMPNLYP
GAPGAGYPPVPPGGFGQPPSAQQPVPPYGYPPPPGGNPPSRMPSYPPYPGAPVPGQPMPPPGQQPPGAYPGQPPV
TYPGQPPVPLPGQQQPVPSYPGYPGSGTVTPAVPPTQFGSRGTITDAPGFDPLRDAEVLKAMKGFGTDEQAIID
CLGSRSNKQRQQIILLSFKTAYGKDLIKDLKSELSGNFECTILALMKTPVLFDIYEIKEAIKGVGTDEACLEILA
SRSNEHIRELNRAYKAFFKKTLEEAIRSDTSGHFQRLISLSQGNRDESTNVDMSLAQRDAQELYAAGENRLGTD
ESKFNAVLCSRSRAHLVAVFNEYQRMGTGRDIEKSICREMSGDLEEGMLAVVKCLKNTPAFFAERLNKAMRGAGTK
DRTLIRIMVSRSETDLLDIRSEYKRMYGKSLYHDISGDTSGDYRKILLKICGGND

WO 2004/030615

PCT/US2003/028547

3241/6881
FIGURE 2992

GGTAGAGGCGGCGGCGGCGGCGGCGGCGGCGGCTCGGAGGCAGCGGTTGGGCTCGCGGCGAGCGGACGGGGTCGAGT
CAGTGCCGTTTTCGCCAGTTGGAATCGAAGCCTCTTAAATGCGCAGATGATTTGGACTTCGAGACAGGAGATGCA
GGGGCCTCAGCCACCTTCCCAATGCAGTGCTCAGCATTACGTAAGAATGGCTTTGTGGTGCTCAAAGGCTGGCCA
TGTAAGATCGTGGAGATGTCTGCTTCGAAGACTGGCAAGCACGGCCACGCCAAGGTCCATCTGGTTGGTATTGAC
ATCTTTACTGGGAAGAAATATGAAGATATCTGCCCGTCAACTCATAATATGGATGTCCCCAACATCAGAAGGAAT
GACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCACTGCTCCAGGACAGCGGGGAGGTACCAGAGGACCTT
CGTCTCCCTGAGGGAGACCTTGGCAAGGAGACTGAGCAGAAGTACGACTGTGGAGAAGAGATCCTGATCACGGTG
CTGTCTGCCATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAATTAAGTGGCTCCCAAGGTGGCAGTG
GTGGCAGCAGTGATCCTCCGAACCTGCAGAGGCCCTCCCCAGCCTGGCCTGGCTCTGGCCTGGTCTTAGGCT
GGACTCCTCCTACACAATTTATTTGACGTTTTATTTTGGTTTTCCCCACCCCTCAATCTGTCAGGGAGCCCCCTG
CCCTTCACCTAGCTCCCTTGGCCAGGAGCGAGCAAAGCCGTGGCCTTGGTGAAGCTGCCCTCCTCTCTCCCCCTC
ACACTACAGCCCTGGTGGGGGAGAAGGGGTGGGTGCTGCTTGTGGTTTAGTTTTTTTTTTTTTTTTTTTTTAAT
TCAATCTGGAATCAGAAAGCAGTGGATTCTGGCAAATGGTCCTTGTGCCCTCCCCACTCATCCTTGGTCTGGTCC
CCTGTTGCCCATAGCCCTTTACCCTGAGCACCACCAACAGACTGGGGACCAGCCCCCTCGCCTGCCTGTGTCTC
TCCCCAAACCCCTTTAGATGGGGAGGGAAGAGGAGGAGAGGGGAGGGGACCTGCCCCCTCCTCAGGCATCTGGGA
AGGCCCTGCCCCCATGGGCTTTACCCTTCCCTGAGGGCTCTCTCCCCGACACATTTGTTAAATCAAACCTGAAT
AAACTACAAGTTTAAATATG

WO 2004/030615

PCT/US2003/028547

3242/6881
FIGURE 2993

MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGWPCKIVEMSASKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNI¹RRNDFQLIGIQDGYLSLLQDSGEVPEDLRLPEGDLGKETEQKYDCGEEILITVLSAMTEEA²AVAIK
AMAK

WO 2004/030615

PCT/US2003/028547

3243/6881
FIGURE 2994

GTCAGTGCCGTTTGCGCCAGTTGGAATCGAAGCCTCTTAAATGCGCAGATGATTGGACTTCGAGACAGGAGATG
CAGGGGCCTCAGCCACCTTCCCAATGCAGTGCTCAGCATTACGTAAGAATGGCTTTGTGGTGCTCAAAGGCTGGC
CATGTAAGATCGTGGAGATGTCTGCTTCGAAGACTGGCAAGCACGGCCACGCCAAGGTCCATCTGGTTGGTATTG
ACATCTTTACTGGGAAGAAATATGAAGATATCTGCCCCTCAACTCATAATATGGATGTCCCCAACATCAGAAGGA
ATGACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCACTGCTCCAGGACAGCGGGGAGGTACCAGAGGACC
TTCGTCTCCCTGAGGGAGACCTTGGCAAGGAGACTGAGCAGAAGTACGACTGTGGAGAAGAGATCCTGATCACGG
TGCTGTCTGCCATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAATAACTGGCTCCCAAGGTGGCAG
TGGTGGCAGCAGTGATCCTCTGGCCTGGTCCTAGGCTGGACTCCTCCTACACAATTTATTTGACGTTTATTTTG
GTTTTCCCCACCCCTCAATCTGTCAGGGAGCCCCTGCCCTTACCTAGCTCCCTTGGCCAGGAGCGAGCAAAGC
CGTGGCCTTGGTGAAG

WO 2004/030615

PCT/US2003/028547

3244/6881

FIGURE 2995

MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGWPCKIVEMSASKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNIRRNDNFLIGIQDGYLSLLQDSGEVPEDLRLPEGDLGKETEQKYDCGEEILITVLSAMTEEAVAIK
AMAK

WO 2004/030615

PCT/US2003/028547

3245/6881
FIGURE 2996

GGCACGAGGAGGTGTGGACGCTGTGTATGAAATGTCTTTCTCCAGGACCCAAGTTTCTTCACCATGGGGATGTG
GTCCATTGGTGACAGGAGCCCTGGGGGCTGCTGCCTTGGCATTGCTGCTTGCCAACACAGACGTGTTTCTGTCCAA
GCCCCAGAAAGCGGCCCTGGAGTACCTGGAGGATATAGACCTGAAAACACTGGAGAAGGAACCAAGGACTTTCAA
AGCAAAAGGAGCTATGGGAAAAAATGGAGCTGTGATTATGGCCGTGCGGAGGCCAGGCTGTTTCTCTGTGCGAGA
GGAAGCTGCGGATCTGTCTCCCTGAAAAGCATGTTGGACCAGCTGGGCGTCCCCCTCTATGCAGTGGTAAAGGA
GCACATCAGGACTGAAGTGAAGGATTTCCAGCCTTATTTCAAAGGAGAAATCTTCCTGGATGAAAAGAAAAAGTT
CTATGGTCCACAAAGGCGGAAGATGATGTTTATGGGATTTATCCGTCTGGGAGTGTGGTACAACCTTCTCCGAGC
CTGGAACGGAGGCTTCTCTGGAACCTGGAAGGAGAAGGCTTCATCCTTGGGGGAGTTTTCTGTGGTGGGATCAGG
AAAGCAGGGCATTCTTCTTGAGCACCGAGAAAAAGAATTTGGAGACAAAGTAAACCTACTTTCTGTTCTGGAAGC
TGCTAAGATGATCAAACACAGACTTTGGCCTCAGAGAAAAATGATTGTGTGAACTGCCAGCTCAGGGATAA
CCAGGGACATTCACCTGTGTTTATGGGATGTATTGTTTCCACTCGTGTCCCTAAGGAGTGAGAAACCCATTTATA
CTCTACTCTCAGTATGGATTATTAATGTATTTTAATATTCTGTTTAGGCCCACTAAGGCAAAATAGCCCCAAAAC
AAGACTGACAAAAATCTGAAAACTAATGAGGATTATTAAGCTAAAACCTGGGAAATAGGAGGCTTAAAATTGAC
TGCCAGGCTGGGTGCAGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGAGCAAGTCACTTGAGG
TCGGGAGTTCGAGACCAGCCTGAGCAACATGGCGAAACCCCGTCTCTACTAAAAATACAAAAATCACCCGGGTGT
GGTGGCAGGCACCTGTAGTCCCAGCTACCCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGTGGAGGT
TGCGGTGAGCTGAGATCACACCACTGTATTCCAGCCTGGGTGACTGAGACTCTAACTAAAAAAAAAAAAAAAAAA
AAA

WO 2004/030615

PCT/US2003/028547

3246/6881
FIGURE 2997

MWSIGAGALGAAALALLANTDVFLSKPQKALEYLEDIDLKTLKEPRTFKAKELWEKNGAVIMAVRRPGCFLC
REEAADLSSLKSMLDQLGVPLYAVVKEHIRTEVKDFQPYFKGEIFLDEKKKFYGPQRRKMMFMGFIRLGWYNFF
RAWNGGFSGNLEGEFILGGVFVVGSGKQGILLEHREKEFGDKVNLLSVLEAAKMIKPQTLASEKK

WO 2004/030615

PCT/US2003/028547

3247/6881
FIGURE 2998

GTGATGCAGTGCGCCGGAGGAACTGTGCTCTTTGAGGCCGACGCTAGGGGCCCCGGAAGGGAACTGCGAGGCGAA
GGTGACCGGGGACCGAGCATTTTCAGATCTGCTCGGTAGACCTGGTGCACCACCACCATGTTGGCTGCAAGGCTGG
TGTGCTCCGGACACTACCTTCTAGGGTTTTCCACCCAGCTTTACCAAGGCCTCCCCTGTTGTGAAGAATTCCA
TCACGAAGAATCAATGGCTGTTAACACCTAGCAGGGAATATGCCACCAAAACAAGAATTGGGATCCGGCGTGGA
GAACTGGCCAAGAAGCTCAAAGAGGCAGCATTGGAACCATCGATGGAAAAAATATTTAAAATTGATCAGATGGGAA
GATGGTTTGTGCTGGAGGGGCTGCTGTTGGTCTTGGAGCATTGTGCTACTATGGCTTGGGACTGTCTAATGAGA
TTGGAGCTATTGAAAAGGCTGTAATTTGGCCTCAGTATGTCAAGGATAGAATTCATTCCACCTATATGTACTTAG
CAGGGAGTATTGGTTTAAACAGCTTTGTCTGCCATAGCAATCAGCAGAACGCCTGTTCTCATGAACCTTCATGATGA
GAGGCTCTTGGGTGACAATTGGTGTGACCTTTGCAGCCATGGTTGGAGCTGGAATGCTGGTACGATCAATACCAT
ATGACCAGAGCCCAGGCCCAAAGCATCTTGCTTGGTTGCTACATTCTGGTGTGATGGGTGCAGTGGTGGCTCCTC
TGACAATATTAGGGGGTCTCTTCTCATCAGAGCTGCATGGTACACAGCTGGCATTGTGGGAGGCCTCTCCACTG
TGGCCATGTGTGCGCCAGTGAAAAGTTTCTGAACATGGGTGCACCCCTGGGAGTGGGCCTGGGTCTCGTCTTTG
TGTCTCATTTGGGATCTATGTTTCTTCCACCTACCACCGTGGCTGGTGGCACTCTTTACTCAGTGGCAATGTACG
GTGGATTAGTTCTTTTTCAGCATGTTCTTCTGTATGATACCCAGAAAGTAATCAAGCGTGCAGAAGTATCACCAA
TGTATGGAGTTCAAAAATATGATCCCATTAACTCGATGCTGAGTATCTACATGGATACATTAAATATATTTATGC
GAGTTGCAACTATGCTGGCAACTGGAGGCAACAGAAAGAAATGAAGTGAAGTCAAGCTTCTGGCTTCTCTGCTACAT
CAAATATCTTGTTTAAATGGGGCAGATATGCATTAAATAGTTTGTACAAGCAGCTTTCGTTGAAGTTTAGAAGATA
AGAAACATGTCATCATATTTAAATGTTCCGGTAATGTGATGCCCTCAGGTCTGCCCTTTTTTCTGGAGAATAAATG
CAGTAATCCTCTCCCAAATAAGCACACACATTTTCAATTCTCATGTTTGAGTGATTTTAAAATGTTTGGTGAAT
GTGAAAACATAAGTTTGTGTCATGAGAATGTAAGTCTTTTTTCTACTTTAAAATTTAGTAGGTTCACTGAGTAAC
TAAAATTTAGCAAACCTGTGTTTGCATATTTTTTGGAGTGCAGAATATTGTAATTAATGTCATAAGTGATTTGG
AGCTTTTGGTAAAGGGACCAGAGAGAAGGAGTCACCTGCAGTCTTTTGTTTTTTAAATACTTAGAACTTAGCACT
TGTGTTATTGATTAGTGAGGAGCCAGTAAGAAACATCTGGGTATTGGAAACAAGTGGTCATTGTTACATTCATC
TGCTGAACCTTAACAAAACCTGTTTCATCCTGAAACAGGCACAGGTGATGCACTTCTCCTGCTGTTGCTTCTCAGTGCT
CTCTTTCCAATATAGATGTGGTCATGTTTGACTTGTACAGAATGTTAATCATACAGAGAATCCTTGATGGAATTA
TATATGTGTGTTTTACTTTTTGAATGTTACAAAAGGAAATAACTTTAAAACCTATTCTCAAGAGAAAATATTCAAAG
CATGAAATATGTTGCTTTTTCCAGAATACAAACAGTATACTCATGATTGCTAAGTGTTTTTTTATTTTGCATAT
TTATTGAAGTGTCTAATTGAATACAGCTTGCTCTTGTACCTCTTCAAGCTTTCAAGCCTTTATAGAAAAGCTTC
TTTGTGGCTTACACTGGAAATTATGAAAGCAGTTTTTCTCCTAAGACTTTTGGTTTTCTCGCATTGCCTCTCAGAC
TAAGCACTAAAAGCAAAGCAAAACAGAACTAGTTCTGTCTTAATGAAATATATCAACCCAAAAGTGAATGAGG
AAAATGCTTCATTAGTTTTCCCTAGCAGACTTTTACTTCTCTTACACTGCTACACCATTACTTTCTTGAGACATT
TGTAAGTTCTTTGATACAGAAGAGTTATATTTAGAAGTCTTTAATGAAGG

WO 2004/030615

PCT/US2003/028547

3248/6881
FIGURE 2999

CAGGACCCAAGGAACCAAAATTGCATCTGATGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTGTCAGAATGATGA
AGTTGCATTTAGAAAATTCAAGCTGATTACTGAAGATGTTTCAGGGTAAAAACTGCCTGACTAACTTCCATGGCGT
GGATCTTACCAGTGACAAAATGTGTTCCATGGTCAAAAAATGGCAGACAATGATTGAAGCTCACGTTGATGTCAA
GACTACCGATGGTTACTTGCTTCGTCTGTTCTGTGTTGGTTTTACTAAAAACGCAACAATCAGATACGGAAGAC
CTCTTATGCTCAGTACCAGCCAAATCCGGAAGAAGATGATGGAAATCATGACCCGAGAGGTGCAGACAAATGACT
TGAAAGAAGTGGTCAATAAATTGATTCCAGACAGCATTGGAAAAGACGTAGAAAAGGCTTGCCAATCTATTTATC
CTCTCCATGATGTCTTCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAAGTTTGAATTGGGAAAGCTCATGGAGC
TTCATGGTGAAGGCTGTAGTTCTGGAAAAGCCACTGGGGACGAGACAGGTGTTAAAGTTGAACGAGCTGATGGAT
ATGAACTACCAGTCCAAGAATCTGTTTAAATTCAGACTTCAAATAGTGTCAAATAAAAAGTGCTATT

WO 2004/030615

PCT/US2003/028547

3249/6881
FIGURE 3000

CTGACCAGCACCA**ATCG**TGGTTGACAAGAACAAGCGCCTTACGAAAGGTGGCAAAAAGGGAGCCAAGAAGAAAGTG
GTTGATCCATTTTCTAAGAAAGATTGGTACGATGTGAACGCACCTGCTATGTTCAATATAAGAAATATTGGAAAG
ACGCTCGTCACCAGGACCCAAGGAACCAAAATTGCATCTGATGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTTG
CAGAATGATGAAGTTGCATTTAGAAAATTCAAGCTGATTACTGAAGATGTTTCAGGGTAAAAACTGCCTGACTAAC
TTCCATGGCGTGGATCTTACCAGTGACAAAATGTGTTCCATGGTCAAAAAATGGCAGACAATGATTGAAGCTCAC
GTTGATGTCAAGACTACCGATGGTTACTTGCTTCGTCTGTTCTGTGTTGGTTTTACTAAAAACGCAACAATCAG
ATACGGAAGACCTCTTATGCTCAGCACCAGCAGGTCCGCCAAATCCGGAAGAAGATGATGGAAATCATGACCCGA
GAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAATAAATTGATTCCAGACAGCATTGGAAAAGACGTAGAAAAG
GCTTGCCAATCTATTTATCCTCTCCATGATGTCTTCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAAGTTTGAA
TTGGGAAAGCTCATGGAGCTTCATGGTGAAGGCTGTAGTTCTGGAAAAGCCACTGGGGACGAGACAGGTGTTAAA
GTTGAACGAGCTGATGGATATGAACTACCAGTCCAAGAATCTGTT**TAAA**AATTCAGACTTCAAATAGTGTCAAATA
AAAAGTGCTATT

WO 2004/030615

PCT/US2003/028547

3250/6881
FIGURE 3001

MVVDKNKRLTKGGKKGAKKKVVDPFSSKDWYDVNAPAMFNIRNIGKTLVTRTQGTKIASDGRVFEVSLADLQND
VAFRKFKLITEDVQGKNCLTNFHGVDLTSDKMCMSVKKWQTMIEAHVDVKTTDGYLLRLFCVGF TKKRNNQIRKT
SYAQHQQVRQIRKKMMEIMTREVQTNDLKEVVNKLIPDSIGKDVEKACQSIYPLHDVFVRKVKMLKKPKFELGKL
MELHGECCSSGKATGDETGVKVERADGYELPVQESV

WO 2004/030615

PCT/US2003/028547

3251/6881
FIGURE 3002

GGGAGAGTGAGGATGGCAGAGACCAGTGCCTTGCCACCGGCTTCGGGGAGCTCGAGGTGCTGGCTGTGGGGATG
GTGCTACTGGTGGAAGCTCTCTCCGGTCTCAGCCTCAATACCCTGACCATCTTCTCTTTCTGCAAGACCCCGGAG
CTGCGGACTCCCTGCCACCTACTGGTGCTGAGCTTGGCTCTTGCGGACAGTGGGATCAGCCTGAATGCCCTCGTT
GCAGCCACATCCAGCCTTCTCCGTGTCTCCCACAGGCGCTGGCCCTACGGCTCGGACGGCTGCCAGGCTCACGGC
TTCCAGGGCTTTGTGACAGCGTTGGCCAGCATCTGCAGCAGTGCAGCCATCGCATGGGGGCGTTATCACCCTAC
TGCACCCGTAGCCAGCTGGCCTGGAACCTAGCCGTCTCTCTGGTGCTCTTCGTGTGGCTGTCTTCTGCCCTTCTGG
GCAGCTCTGCCCCCTTCTGGGTGGGGTCACTATGACTATGAGCCACTGGGGACATGCTGCACCCTGGACTACTCC
AAGGGGGACAGAACTTCACCAGCTTCCTCTTCACCATGTCTTCTTCAACTTCGCCATGCCCTCTTTCATCAG
ATCACTTCCTACAGTCTCATGGAGCAGAACTGGGGAAGAGTGGCCATCTCCAGGTAAACACCCTCTGCCAGCA
AGGACGCTGCTGCTCGGCTGGGGCCCCCTATGCCATCTGTATCTATACGCAGTCATCGCAGACGTGACTTCCATC
TCCCCCAAAGTGCAGATGGTGCCCGCCCTCATTGCCAAATGGTGCCACGATCAATGCCATCAACTATGCCCTG
GGCAATGAGATGGTCTGCAGGGGAATCTGGCAGTGCCCTCACCCGAGAAGAGGGAGAAGGACCGAACCAAGTGA

GCCTGCCACCCTGGAGTGAGCCCCAGGCCAGGAGGCTGTTCCAGGAGTCTGCCCCAGCAGCCTCGGTGGCCAAGC
CCAGACACTCACCACCTTCCCCAGTGGCCCCGTGGATCCTGGTCCTAGGCTGGACACAGGATTTCAGAAAGACAC
CAGGCTGCACAGAAAGAGCCAGATGGACCTGAGTGTGCGTCACAGCCCCCTACACTCAAGGCTGAGAGGCCTCAG
GAAAGTCATTCTTTTTAAAAATAATAATAATGTAAGGGGGTACAGTGCAGTTTTGTTACATGGATAGATTGCC
TAGTGGTGAAGTCTGGGCTTTTAGTGTAAACCATCACCTAATAATATACGTTGTACCCATTAAAGTTATTTCTCAT
CCCTCACCCCCCTCCACCTTGTCAACCTTCTGAGTCTCCAATGTCTATTATTCCACACTCCATGTCCACGTGTAC
ACATTATTTAGCTCCCACTTACAAGTGAGAACATGTGGTATTTGACTTTCTGTTTTTGTAGTTATTTCACTTAAAA
TAATGACCTCCAGTTTCATCCATGTTGCTGCAAAAGACATGATCTCGTTCTTTTTTATGGCAGTGTAGTATTCCA
TTCCATATACATATATAAACGTTATATATATGTAACGTTTTCTTTATCCAATCATCTGTTGATGGATAGATTCCA
TATCTTTGCTACTGTAAACAGAGCTGTGATAAGCATACAAGTGCAGGTTTTCTTTTTGATATACTGATTTCTTTTC
CTTTGGGTAGATACCAGTAGTAGGACTGCTGGATCAAATGGTAGCTCTATTTTTAAGACAGTATGGAGAAATCAC
CATACTGTTTTCCATAGGGGTGTACTAATTTACAGTCCCACCAACAGTGTATAGGTGTTCCCTTTTCTCTGCAT
CCTTACCAATATCTGTAATTTTTGACTTTTTAATAATAGCCATTCTCATTTGTGTGAGATAAGGTCTCATTGTG
GTTTTAATTTCCATTTCTCTGATGACTTTTGATGTTAAGCATTTTTCATATGCTTCTTAGCCACGTGTATGTAT
TCTTTTTGAAAAATGTTTATTCATGTCTTTTGCCCACTTTTAAATGGCATTATTTGGATTTTTTTGTTGAGTT
ATTTGAGTTTCTTATATATTCTGGATAATAGTCTGGATAATATATTCTGGATAATATATAATAGTCTTATATATT
CTGGATATATTCTGGATACATGGTTTGCAAATATTTCTCCGGTCTGCACGTTGTTCAATCTGTTGATGGTTTA
TTTTGCTGTGCAGAACTTTTTTAGTTTTAATTAAGTCCCATTTGTCTAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3252/6881
FIGURE 3003

MAETSAIPTGFGELEVLAVGMVLLVEALSGLSLNLTITFSFCKTPELRTPCHLLVLSLALADSGISLNALVAATS
SLLRVSHRRWPYGS DGCQAHGFQGFVTALASICSSAAIAWGRYHHYCTRSQLAWNSAVSLVLFVWLSSAFWAALP
LLGWGHYDYEPLGTCCTLDYSKGDRNFTSFLFTMSFFNFAMPLFITITISYSLMEQKLGKSGHLQVNTTLPARTLL
LGWGPYAILLYLYAVIADVTSISP K LQMVPAIAKMVPTINAINYALGNEMVCRGIWQCLSPQKREKDR TK

WO 2004/030615

PCT/US2003/028547

3253/6881
FIGURE 3004

GGGCAACCCGCGCGGGACCCCTTCCTCCCTAGTCGCGGGGAGTCTGAGAAAGCGCGCCTGTTTCGCGACCATCACG
CACCTCCCCTCCGCTTGTGGCCATGTACCGCTACCTGGGCGAAGCGCTGTTGCTGTCCCGGGCCGGGCCCGCTGC
CCTGGGCTCGGCGTCCGCCGACTCGGCCGCGTTGCTGGGCTGGGCCCGGGGACAGCCCGCCGCCGCCCGCAGCC
GGGGCTGGCATTGGCCGCCCGGCGCCACTACAGCGAGGCGGTGGCCGACC GCGAGGACGACCCCAACTTCTTCAA
GATGGTGGAGGGCTTCTTCGATCGCGGCGCCAGCATCGTGAGGACAAGCTGGTGGAGGACCTGAGGACCCGGGA
GAGCGAGGAGCAGAAGCGGAACCGGGTGC GCGGCATCCTGCGGATCATCAAGCCCTGCAACCATGTGCTGAGTCT
CTCCTTCCCCATCCGGCGCGACGACGGCTCCTGGGAGGTATCGAAGGCTACCGGGCCAGCACAGCCAGCACCCG
CACGCCCTGCAAGGGAGGTATCCGTTACAGCACTGATGTGAGTGTAGATGAAGTAAAAGCTTTGGCTTCTCTGAT
GACATACAAGTGTGCAGTGGTTGATGTGCCGTTTGGGGGTGCTAAAGCTGGTGTAAAGATCAATCCCAAGAACTA
TACTGATAATGAATTGGAAAAGATCACAAGGAGGTTACCATTGGAGCTAGCAAAAAGGGCTTTATTGGTCCTGG
CATTGATGTGCCTGCTCCAGACATGAGCACAGGTGAGCGGGAGATGTCTGGATCGCTGATACCTATGCCAGCAC
CATAGGGCACTATGATATTAATGCACACGCCTGTGTTACTGGTAAACCCATCAGCCAAGGGGGAAATCCATGGACG
CATCTCTGCTACTGGCCGTGGTGTCTTCCATGGGATTGAAAATTTTCATCAATGAAGCTTCTTACATGAGCATTTT
AGGAATGACACCAGGGTTTGGAGATAAAACATTTGTTGTTTCAAGGATTTGGTAATGTGGGCCTACACTCTATGAG
ATATTTACATCGTTTTTGGTGCTAAATGTATTGCTGTTGGTGAGTCTGATGGGAGTATATGGAATCCAGATGGTAT
TGACCCAAAGGAAGTGAAGACTTCAAATTGCAACATGGGTCCATTCTGGGCTTCCCCAAGGCAAAGCCCTATGA
AGGAAGCATCTTGGAGGCCGACTGTGACATACTGATCCAGCTGCCAGTGAGAAGCAGTTGACCAAATCCAACGC
ACCCAGAGTCAAAGCCAAGATCATTGCTGAAGGTGCCAATGGGCCAACAACCTCCAGAAGCTGACAAGATCTTCCT
GGAGAGAAACATTATGGTTATTCCAGATCTCTACTTGAATGCTGGAGGAGTGACAGTATCTTACTTTGAGTGGCT
GAAGAATCTAAATCATGTGAGCTATGGCCGTTTGACCTTCAAATATGAAAGGGATTCTAACTACCACTTGCTCAT
GTCTGTTCAAGAGAGTTTAGAAAGAAAATTTGGAAAGCATGGTGGAATATTCCCATTTGACCCACGGCAGAGTT
CCAAGACAGGATATCGGGTGCATCTGAGAAAGACATCGTGCACTCTGGCTTGGCATAACAATGGAGCGTTCTGC
CAGGCAAATTATGCGCACAGCCATGAAGTATAACCTGGGATTGGACCTGAGAACAGCTGCCATGTTAATGCCAT
TGAGAAAGTCTTCAAAGTGTACAATGAAGCTGGTGTGACCTTCACATAGATGGATCATGGCTGACTTCCTCACTA
TCCTCTTCACATGTAACCTTCTGCAGACCTATCACAAGTTTACATGTAACCACAGAAATCCCTTTCTCTCCTGACT
CATTATAATGGATACCATTCTCAACAAGTCAATCCAAGTCAGCCCCTTAAGGAGAAAGAAATTAAGGTTAGCGG
ATCATGTACAAGCTGAGTGTGAAAGTAGAAATCACCTACACCAGAGAGCCATTTTGGTATTTTGCCTTTAAATAA
AAAGCCTCCTTTATCTGGCTGTGCAGCCTTGCTCTGTGGCTTTTCCCAACACAATCAGTGCTAGTGCTGGGGAGG
AACAGTCAAGAGCAGTCAGTTGCTTGCTTATTTTTCTGGATGAGTCTGGGACACACTGTAACTTTAACACATTT
AAGAAGTAGGTGTGTGGCCTTTTCAAGAGGTGGCATGGTCTCAAGTGAGTTCTTAGTATTTTATATCAGCAAAA
TAATTCAATTTTGCAGGTTGCAAACAAATATAAAACCTGTTTCTGTTTATGAATATTATCTTTTAGAATAGAAT
AAGTACATGCTGCTGTAATAAAATTGCCTTTAATCACTTAACAAGCCTAACCTTGACTCAAACAGTGAATGCCTA
TAGAAATAATAAATGAAAAAACTAGTATTTTTATATCATAAAACAATGTCAATTTATAGCTTATCATTATGTAT
TGTCCAGCAGACATTAAAAGCCCTGTGGATAATTAAGTTATCTTCATACCTGCAAAATGGTGGAGGCTATTTTCA
TAAAACCTGTGCAATTTGCTTACCATAATTATGATACAGTCCAAAGAATGCAGTCACTTTTATCATGTAACT
AATTGTTCTCTTTTGAAGATCTATGGTTGACTAATTAAACAATAATTCAAGTAGAGTGTCCAGAAAAAAACCAC
TTGGGCTCCCTGTTTGGAGTCTGGCTGGCTCTGAGCATTGCCAATGGCCCTACTCACCTGACTTTGTATCCTCT
CCTTTTAGAGGCTTTGCATTCTGCACCCAGCTTCACTAACAGTGGGCTGAAAACATCCTTGGGTTGAGTGTTC
TTTGGGAGTTATTTGGCCAGGGCCTTTTGAACAGTAGTGTCCCATGAAGTGCTAGATAATATATGTGTAAGAGT
CAGCTTTTTTTTTTTTTTAACTCTAACACCCCTTCAGAAATTTCTAACTACTTTGTAAGTGCATGGCTTAACCT
GGTGATAAAAGCAGTTATTAAAAGTCTACGTTTTCCAAAAA

WO 2004/030615

PCT/US2003/028547

3254/6881
FIGURE 3005

MYRYLGEALLLSRAGPAALGSASADSAALLGWARGQPAAAPQPGLALAARRHYSEAVADREDDPNFFKMVEGFFD
RGASIVEDKLVEDLRTRESEEQKRNRVRGILRIIKPCNHVLSLSFPIRRDDGSWEVIEGYRAQHSQHRTPCGGI
RYSTDVSVDEVKALASLMTYKCAVVDVPFGGAKAGVKINPKNYTDNELEKITRRFTMELAKKGFIGPGIDVPAPD
MSTGEREMSWIADTYASTIGHYDINAHACVTGKPISQGGIHGRISATGRGVFHGIENFINEASYMSILGMTPGFG
DKTFVVQGFQGNVGLHSMRYLHRFGAKCIAVGESDGSIWNPDGIDPKELEDFKLQHGSI LGFPKAKPYEGSILEAD
CDILIPAASEKQLTKSNAPRVKAKIIAEGANGPTTPEADKIFLERNIMVIPDLYLNAGGVTVSYFEWLKNLNHVS
YGRITFKYERDSNYHLLMSVQESLERKFGKHGGTIPVPTAEFQDRISGASEKDIVHSGLAYTMERSARQIMRTA
MKYNLGLDLRTAAYVNAIEKVFKVYNEAGVTFT

WO 2004/030615

PCT/US2003/028547

3255/6881
FIGURE 3006

ATGGGGGAGAATATCATTGTAGAAAATGGAAACAGTGTGGATCAAGGTAGAGTGGATCTCGTGCAGGGTCCCCTT
GGTGAACAGTGGCCATGTCCGCAACACTGGGTGCATTGGGACAGCACCAGGTATGAACCTCATCATAGCAGCCAT
CACAAGGACAAGGCCATTAAGAAATTCGTCATTCAAAACATAGTGGAGGCCACAGCAGTCAGGGACATTTCTGAA
GCGAGCGTCTTTGATGCCTATGTGCGTCCCAAGCTGTATGTGAAGCTACATTACTGTGTCTTCACTTCTGCTGTG
TCTACGCTTCTCTTCTTTACCTTAA

WO 2004/030615

PCT/US2003/028547

3256/6881
FIGURE 3007

MGENIIVENGNSVDQGRVDLVQGGLGEQWPCPQHVVHWDSTRYEPHSSHKDKAIKKFVIQNIVEATAVRDISE
ASVFDAYVRPKLYVKLHYCVFTSAVSTLLFFT

WO 2004/030615

PCT/US2003/028547

3257/6881
FIGURE 3008

GCAGCCCAGCCAAGCACTGTCAGGAATCCTGTGAAGCAGCTCCAGCTATGTTGTGAAGAAGAGGACAGCACTGCCT
TGGTGTGTGACAATGGCTCTGGGCTCTGTAAAGCCGGCTTTGCTGGGGACGATGCTCCCAGGGCTGTTTTCCCAT
CCATTGTGGGACGTCCCAGACATCAGGGGGTGATGGTGGGAATGGGACAAAAAGACAGCTACGTGGGTGACGAAG
CACAGAGCAAAAAGAGGAATCCTGACCCTGAAGTACCCGATAGAACATGGCATCATCACCAACTGGGACGACATGG
AAAAGATCTGGCACCACCTCTTTCTACAATGAGCTTCGTGTTGCCCTGAAGAGCATCCCACCCTGCTCACGGAGG
CACCCCTGAACCCCAAGGCCAACCGGGAGAAAATGACTCAAATTATGTTTGAGACTTTCAATGTCCCAGCCATGT
ATGTGGCTATCCAGGCGGTGCTGTCTCTCTATGCCTCTGGACGCACAACCTGGCATCGTGCTGGACTCTGGAGATG
GTGTCACCCACAATGTCCCCATCTATGAGGGCTATGCCTTGCCCCATGCCATCATGCGTCTGGATCTGGCTGGCC
GAGATCTCACTGACTACCTCATGAAGATCCTGACTGAGCGTGGCTATTCTTCGTTACTACTGCTGAGCGTGAGA
TTGTCCGGGACATCAAGGAGAACTGTGTTATGTAGCTCTGGACTTTGAAAATGAGATGGCCACTGCCGCATCCT
CATCCTCCCTTGAGAAGAGTTACGAGTTGCCTGATGGGCAAGTGATCACCATCGGAAATGAACGTTTCCGCTGCC
CAGAGACCCTGTTCCAGCCATCCTTCATCGGGATGGAGTCTGCTGGCATCCATGAAACCACCTACAACAGCATCA
TGAAAGTGTGATATTGACATCAGGAAGGACCTCTATGCTAACAATGTCTTATCAGGGGGCACCCTATGTACCCTG
GCATTGCCGACCGAATGCAGAAGGAGATCACGGCCCTAGCACCCAGCACCATGAAGATCAAGATCATTGCCCTC
CGGAGCGCAAATACTCTGTCTGGATCGGTGGCTCCATCCTGGCCTCTCTGTCCACCTTCCAGCAGATGTGGATCA
GCAAACAGGAATACGATGAAGCCGGGCTTCCATTGTCCACCGCAAATGCTTCTAAAACTTTCTGCTCCTCT
CTGTCTCTAGCACACAACCTGTGAATGTCCTGTGGAATTATGCCTTCAGTTCTTTTCCAATCATTCTAGCCAAA
GCTCTGACTCGTTACCTATGTGTTTTTAATAAATCTGAAATAGGCTACTGGTAA

WO 2004/030615

PCT/US2003/028547

3258/6881
FIGURE 3009

MCEEEDSTALVCDNGSGLCKAGFAGDDAPRAVFPSIVGRPRHQGVVMGMGQKDSYVGDEAQSKRGILTLKYPIEH
GIITNWDDMEKIWHHSFYNELRVAPEEHPTLLTEAPLNPKANREKMTQIMFETFNVPAMYVAIQAVLSLYASGRT
TGIVLDSGDGVTHNVP IYEGYALPHAIMRLDLAGRDLTDYLMKILTERGYSFVTTAEREIVRDIKEKLCYVALDF
ENEMATAASSSSLEKSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGIHETTYNSIMKCDIDIRKDLYANNV
LSGGTTMYPGIADRMQKEITALAPSTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDEAGPSIVHRK
CF

WO 2004/030615

PCT/US2003/028547

3259/6881
FIGURE 3010

ACTTTCCTTTTGTAACTGTCAGCTGAAGGGAAACAAACAAAAGGAACAGAGGCCACTTGTATATATAGGTCTC
TTCAGCATTATTGTTGGCAGAAAGAGGAAGATTTCTGAAGAGTGCAGCTGCCTGAACCGAGCCCTGCCGAACAGC
TGAGAATTGCACTGCAACCATGAGTGAGAACAATAAGAATTCCTTGGAGAGCAGCCTACGGCAACTAAAATGCCA
TTTCACCTGGAACCTTGATGGAGGGAGAAAACCTCCTTGGATGATTTTGAAGACAAAGTATTTTACCGGACTGAGTT
TCAGAATCGTGAATTCAAAGCCACAATGTGCAACCTACTGGCCTATCTAAAGCACCTCAAAGGGCAAAACGAGGC
AGCCCTGGAATGCTTACGTAAAGCTGAAGAGTTAATCCAGCAAGAGCATGCTGACCAGGCAGAAATCAGAAGTCT
GGTCACCTGGGGAACTATGCCTGGGTCTACTATCACATGGGCCGACTCTCAGACGTTTACAGATTTATGTAGACAA
GGTGAACATGTCTGTGAGAAGTTTCCAGTCCCTATAGAATTGAGAGTCCAGAGCTTGACTGTGAGGAAGGGTG
GACACGGTTAAAGTGTGGAGGAAACCAAAATGAAAGAGCGAAGGTGTGCTTTGAGAAGGCTCTGGAAAAGAAGCC
AAAGAACCCAGAATTCACCTCTGGACTGGCAATAGCAAGCTACCGTCTGGACAACCTGGCCACCATCTCAGAACGC
CATTGACCCCTCTGAGGCAAGCCATTCCGGCTGAATCCTGACAACCAAGTACCTTAAAGTCTCCTGGCTCTGAAGCT
TCATAAGATGCGTGAAGAAGGTGAAGAGGAAGGTGAAGGAGAGAAGTTAGTTGAAGAAGCCTTGGAGAAAGCCCC
AGGTGTAACAGATGTTCTTCGCAGTGCAGCCAAGTTTATCGAAGAAAAGATGAGCCAGACAAAGCGATTGAACT
GCTTAAAAGGCTTTAGAATACATAACCAACAATGCCTACCTGCATTGCCAAATTGGGTGCTGCTATAGGGCAAA
AGTCTTCCAAGTAATGAATCTAAGAGAGAATGGAATGTATGGGAAAAGAAAGTTACTGGAACATAATAGGACACGC
TGTGGCTCATCTGAAGAAAGCTGATGAGGCCAATGATAATCTCTTCCGTGTCTGTTCCATTCTTGCCAGCCTCCA
TGCTCTAGCAGATCAGTATGAAGACGCAGAGTATTACTTCCAAAAGGAATTCAGTAAAGAGCTTACTCCTGTAGC
GAAACAACCTGCTCCATCTGCGGTATGGCAACTTTCAGCTGTACCAATGAAGTGTGAAGACAAGGCCATCCACCA
CTTTATAGAGGGTGTAAAATAAACCAGAAATCAAGGGAGAAAAGAAAGATGAAAGACAAACTGCAAAAAATTGC
CAAAATGCGACTTTCTAAAATGGAGCAGATTCTGAGGCTTTCATGTCTTTGGCATTCTTCAGGAGCTGAATGA
AAAAATGCAACAAGCAGATGAAGACTCTGAGAGGGGTTTGGAGTCTGGAAGCCTCATCCCTTCAGCATCAAGCTG
GAATGGGGAATGAGAATAGAGATGTGGTGCCCACTAGGCTACTGCTGAAAGGGAGCTGAAATTCTCCACCAAG
TTGGTATTCAAAATATGTAATGACTGGTATGGCAAAAGATTGGACTAAGACACTGGCCATACCACTGGACAGGGT
TATGTTAACACCTGAATTGCTGGGTCTTGAGAGAGCCCAAGGAGTTCTGGGAGAGGGACAGATTGGGGGGTAGG
TCCACGGGCTTGGTGATAGAATTATTTCTCGATTGACTTCTTGAGTGCAATTTGAACTGTAACATTTGCTTAGTC
ACCTTTAGTGGAGTAATCTACTGGGCTTGTTTCTATATTTATATAAAGCAGCCAAATCCTTCATGTAATATTGAA
GTCCATTTTTGCAATGTTGTTCCATACTTGGAGTCATTTTGCATCCCATAGAGGTTAGTCCTGCATAGCCAGTAA
TGTGCTAAGTTTATCCAAAAGCTGGCGGACCAAGTCTAAATAGGGCTCAGTATCCCCCATCGCTTATCTCTGCC
TCCTTCTCTCTCTTCCCAGTCTATCATCAACCTTGAGTATTCTACACAATGTGAATTCAAGTGCCTGATTAATT
GAGGTGGCAACATAGTTTGGAGACGAGGGCAGAGAACAGGAAGATACATAGCTAGAAGCGACGGGTACAAAAGCA
ATGTGTACAAGAAGACTTTTCAAGTATACAGAGAGTTACCTCTACTCTGCCCTCCTCATAGTCATAATGTAG
CAAGTAAAGAATGAGAATGGATTCTGTACAATACACTAGAAACCAACATAATGTATTTCTTTAAACCTGTGTGA
AAAAA

WO 2004/030615

PCT/US2003/028547

3260/6881
FIGURE 3011

MSENNKNSLESSLRQLKCHFTWNLMEGENSLDDFEDKVFYRTEFQNREFKATMCNLLAYLKHLKGQNEAALECLR
KAEELIQQEHADQAEIRSLVTWGNIAWVYYHMGRLSDVQIYVDKVKHVCEKFSSPYRIESPELDCEEGWTRLKCG
GNQNERAKVCFEKALEKKPKNPEFTSGLAIASYRLDNWPPSQNAIDPLRQAIRLNPONQYLKVLLALKLHKMREE
GEEEGEGEKLVEEALEKAPGVTDLRSAAKFYRRKDEPDKAIELLKALEYIPNNAYLHCQIGCCYRAKVFQVMN
LRENGMYGKRKLELIGHAVHLKKADEANDNLFVCSILASLHALADQYEDAEYFQKEFSKELTPVAKQLLHL
RYGNFQLYQMKCEDKAIHHFIEGVKINQKSREKEKMKDKLQKIAKMRLSKNGADSEALHVLAFQLNELNEKMQQAD
EDSERGLESGLIPSASSWNGE

WO 2004/030615

PCT/US2003/028547

3261/6881
FIGURE 3012

CTCCCGGACGTAGGTAGTTTGTGGGCCGGGTTCTGAGGCCTTGCTTCTCTTTACTTTTCCACTCTAGGCCACGA
TGCCGCAGTACCAGACCTGGGAGGAGTTTCAGCCGCGCTGCCGAGAAGCTTTACCTCGCTGACCCTATGAAGGCAC
GTGTGGTTCTCAAATATAGGCATTCTGATGGGAACCTGTGTGTTAAAGTAACAGATGATTTAGTTTGTGGTGT
ATAAAACAGACCAAGCTCAAGATGTAAAGAAGATTGAGAAATTCACAGTCAACTAATGCGACTTATGGTAGCCA
AGGAAGCCCCGCAATGTATTTTGGAGCATAAAATGTATGCTGTTGTGACCAATAAATATAAAATATGGTAATTGGA
ATTAACCCACACCATAGTATGCATTGTTATACATACTGTGTACCTAATTATGTATAGCAGTGTAGTCTCAATTA
TATCTAAAAGTAATTGTGACTAACAAGTATGCTTTGCCTTATTTCCACATTTAAAGTACCTGTTAATATAAGGGA
TTTGTAGTATCAGCTTGTTGAGCAATGACTTTGAATCTAGTTTTTCAGTGATCAGAAGCAGCATTATTTGAGTGT
ATGAATGGAATGATGATCACTGTGCTATAATGTACTGAAACCACCATATTACAGAAATATTTACTACATATTTTC
CATCTGTAGTTTCTCAGAAGGGCTATGGATTAGTTTGAAGTGTCAAATCCTTGACATCTTCTGTGACACCCCTGC
CCATTTTCTGTCTTTAATTAACCAAGGTGTTAGGTGTTACTGTCACAACCTGTTATGTTTTCCAGTAACTAGAAG
TACGATATTTGATAATTATATTTGTATCCTAAATTTACCCACCTAAATGTAATGTTGATTCTCAAGAATGAAAT
GAAGGCACTACATTGAAATATGTTTGTATAAATTTGTCATGTTGAACAACATTTTA

WO 2004/030615

PCT/US2003/028547

3262/6881
FIGURE 3013A

CTTCTCTCCCAGGGCGGTGCGACCCGGAGCTCCAGCGCCCGAGTCTCCACTTCGTTTGCTGAAACTTGCTTTCTA
CCAGCTAAGAACCATGCTGCGAGTGATTGTGGAATCTGCCAGCAATATCCCTAAAACGAAATTTGGCAAGCCGGA
TCCTATTGTTTCTGTCAATTTTTAAGGATGAGAAAAAGAAAACAAAGAAAGTTGATAATGAATTGAACCTGTCTG
GAATGAGATTTTGGAGTTTGAATTTGAGGGGTATACCCTGGACTTTTCATCTTCCCTTGGGATTATTGTGAAAGA
TTTTGAGACAATTGGACAAAATAAATTAATTGGCAGCGCGACTGTAGCCCTGAAGGACCTGACTGGTGACCAGAG
CAGATCCCTGCCGTACAAGCTGATCTCCCTGCTAAATGAAAAAGGGCAAGATACTGGGGCCACCATTGACTTGGT
GATCGGCTATGATCCGCCTTCTGCTCCACATCCAATGACCTGAGCGGGCCAGCGTGCCAGGCATGGGAGGAGA
TGGGGAAGAAGATGAAGGTGATGAAGACAGGTTGGACAATGCAGTCAGGGGCCCTGGGCCCAAGGGGCCAGTTGG
GACGGTGTGCGAAGCTCAGCTTGCTCGGAGGCTCACCAAAGTAAAGAACAGCCGGCGGATGCTGTCAAATAAGCC
ACAGGACTTCCAGATCCGCGTCCGAGTGATTGAGGGCCGACAGTTAAGTGGTAACAACATAAGGCCTGTGGTCAA
AGTTCACGTCTGTGGCCAGACACACCGAACAAGAATCAAGAGAGGAAACAACCCCTTTTTTGTAGAGTTGTTTTT
CTACAATGTCAACATGACCCCTTCTGAATTGATGGATGAGATCATCAGCATCCGGGTTTATAATTCTCACTCTCT
GCGGGCAGATTGTCTGATGGGGGAATTTAAGATTGATGTTGGATTGTTTATGATGAACCTGGCCATGCTGTCA
GAGAAAGTGGCTTCTTCTCAATGACCCGGAAGATACCAGTTCAGGTTCTAAAGGTTATATGAAAGTCAGCATGTT
TGTCTTGGGAACCGGAGATGAGCCTCCTCTGAGAGACGAGATCGTGATAATGACAGTGATGATGTGGAGAGTAA
TTTGTTACTCCCTGCTGGCATTGCCCTCCGGTGGGTGACCTTCTGTGAAAAATCTACCGAGCTGAGGACATCCC
CCAGATGGATGATGCCCTTCTCACAGACAGTAAAGGAAATATTTGGAGGCAATGCAGATAAGAAAAATCTCGTGGA
TCCTTTTGTAGAAGTTTCCTTTGCTGGAAAAAGGTTTGTACAAACATAATTGAGAAAAATGCAAACCCAGAGTG
GAATCAGGTGCTCAATCTTCAGATCAAGTTTCCTTCAGTGTGTGAAAAATAAACTAACAATATATGACTGGGA
CCGTCTTACTAAAAATGATGTAGTTGGAACAACATATCTACACCTCTCTAAATTTGCTGCCTCTGGTGGGGAGT
GGAAGATTTCTCATCTTCGGGAAC TGCGGCTGCATCATATACAGTAAACACAGGAGAAACAGAGGTAGGCTTTGT
TCCAACGTTTGGACCTTGTTACCTGAATCTTTATGGAAGCCCCAGGGAGTACACGGGATTCCCAGACCCCTATGA
TGAGCTGAATACTGGAAGGGGGGAAGGAGTTGCCACAGAGGCAGGATCTTGGTTGAATTAGCCACTTTTCTTGA
GAAGACACCACCAGATAAAAAAGCTTGAGCCCATTTCAAAATGATGACCTGCTGGTTGTTGAGAAATACCAGCGAAG
GCGGAAGTACAGCCTGTCTGCCGTGTTTCATTACGCCACCATGTTGCAAGATGTTGGTGAGGCCATTAGTTTGA
AGTCAGCATTTGGGAATATGGCAACAAGTTTGACACCACCTGTAAGCCTTTGGCATCAACAACCTCAGTACAGCCG
TGCTGTATTGATGGCAACTACTATTATTACTTGCCCTTGGGCCCCACACCAAGCCAGTTGTTACCCTGACTTCATA
CTGGGAGGATATTAGTCATCGCCTGGATGCGGTGAACACTCTCCTAGCTATGGCAGAACGGCTGCAAAACAAATAT
AGAAGCTCTAAATCAGGGATACAAGGTAAATTCCTGCAAAACCAGCTGGCTGAATTGTGGCTGAAGCTGATAGA
TGAAGTTATAGAAGACACGAGATACACGTTGCCCTCTACAGAAGGAAAAGCCAACGTACAGTTCTCGATACTCA
GATCCGAAAGCTGCGGTCCAGGTCTCTCTCCCAAATACATGAGGCGGCTGTGAGGATGAGGTGCGGAAGCCACAGA
TGTGAAGTCCACACTGGCAGAAATTTGAGGACTGGCTTGATAAATTAATGCAGCTGACTGAAGAGCCACAGAACAG
CATGCCCTGACATCATCATCTGGATGATCCGGGGAGAGAAGAGACTGGCCTATGCACGAATTCGCCGACATCAGGT
CTTGTAATCCACAGTGGTGAGAATGCATCTGGAAAATACTGTGGGAAAACCCAAACCATCTTTCTGAAGTATCC
ACAGGAGAAAAACAACGGGCCAAAGGTGCCCTGTGGAGTTGCGAGTGAACATCTGGCTAGGCTTAAGTGCTGTGGA
GAAGAAGTTTAACAGCTTCGCAGAAGGAACCTTACCGTCTTTGCTGAAATGTATGAAAAATCAAGCTCTCATGTT
TGGAATTTTCTGCCTCCAAAAGGCTGGGAATGGGAAGGAGAGTGGATAGTTGATCCTGAAAGAAGCTTGCTGAC
TGAGGCAGATGCAGGTCACACGGAGTTCATGATGAAGTCTATCAGAACGAGAGCCGCTACCCCGGGGGCGACTG
GAAGCCGGCCGAGGACCTACACGGATGCGAACGGCGATAAAGCAGCATCACCCAGCGAGTTGACTTGTCTCTCC
AGGTTGGGAATGGGAAGATGATGCATGCTTATGACATAAATCGAGCGGTGGATGAGAAAGGCTGGGAATATGG
AATCACCATTCCTCTGATCATATAAGCCCAAATCTGGGTTGAGCAGAGAAAAATGTACCACACTCATAGACGGCG
AAGGCTGGTCCGAAAACGCAAGAAAGATTTAACACAGACTGCTTCAAGCACCGCAAGGGCCATGGAGGAATTGCA
AGACCAAGAGGGCTGGGAATATGCTTCTCTAATTGGCTGGAAATTTCACTGGAAACAACGTAGTTTCAGATACCTT
CCGCCGACAGCTGGAGGAGAAAAATGGCTCCTTCAGAAACACATGGTGCAGCTGCCATCTTTAACTTGAAGG
TGCCCTTGGGGCAGACACTACCGAAGATGGGGATGAGAAGAGCCTGGAGAAACAGAAGCACAGTGCCACCAGTGT
GTTTCGGAGCAAAACACCCCATTTGTTTCTGCAATTTTGCAGAGTCTACATCTACCATCTGCGTGTATGTCTA
TCAAGCCAGAAACCTCTTGGCTTTAGATAAGGATAGCTTTTCAGATCCATATGCTCATATCTGTTTCTCCATCG

WO 2004/030615

PCT/US2003/028547

3263/6881
FIGURE 3013B

GAGCAAAACCACTGAGATCATCCATTCAACCCTGAATCCCACGTGGGACCAAACAATTATATTCGATGAAGTTGA
AATCTATGGGGAACCCCAAACAGTTCTACAGAATCCACCCAAAGTTATCATGGAACCTTTTTGACAATGACCAAGT
GGGCAAAGATGAATTTTTAGGACGAAGCATTCTCTCTCTGTGGTGAACTGAACTCAGAAATGGACATCACACC
CAAACCTCTCTGGCACCCAGTAATGAATGGAGACAAAGCCTGCGGGGATGTTCTTGTAAGTGCAGAGCTGATTCT
GAGGGCAAGGATGGCTCCAACCTTCCATTCTTCCCCCTCAAAGGGCGCCAAATCTATACATGGTCCCCCAGGG
GATCAGGCCTGTGGTCCAGCTCACTGCCATTGAGATTCTAGCTTGGGGCTTAAGAAATATGAAAACTTCCAGAT
GGCTTCTATCACATCCCCCAGTCTTGTGTGGAGTGTGGAGGAGAAAGGGTGAATCGGTGGTGATCAAAAACCT
TAAGAAGACACCCAACTTTCCAAGTTCTGTTCTCTTCATGAAAGTGTTCTTGCCCAAGGAGGAATTGTACATGCC
CCCACTGGTGATCAAGGTCATCGACCACAGGCAGTTTGGGCGGAAGCCTGTCTGTCGGCCAGTGCACCATCGAGCG
CCTGGACCGCTTTCGCTGTGACCCTTATGCAGGGAAAGAGGACATCGTCCCACAGCTCAAAGCCTCCCTTCTGTC
TGCCCCACCATGCCGGGACATCGTTATCGAAATGGAAGACACCAAACCATTACTGGCTTCTAAGCTGACAGAAAA
GGAGGAAGAAATCGTGGACTGGTGGAGTAAATTTTATGCTTCTCAGGGGAACATGAAAAATGCGGACAGTATAT
TCAGAAAGGCTATTCCAAGCTCAAGATATATAATTGTGAAGTGAAGAAATGTAGCAGAATTTGAGGGCCTGACAGA
CTTCTCAGATACGTTCAAGTTGTACCGAGGCAAGTCGGATGAAATGAAGATCCTTCTGTGGTTGGAGAGTTTAA
GGGCTCCTTTTCGGATCTACCCTCTGCCGATGACCCAGCGTGCCAGCCCCCTCCAGACAGTTTCGGGAATTACC
TGACAGCGTCCCACAGGAATGCACGGTTAGGATTTACATTGTTTCGAGGCTTAGAGCTCCAGCCCCAGGACAACAA
TGGCCTGTGTGACCTTACATAAAAAATAACACTGGGCAAAAAAGTCATTGAAGACCGAGATCACTACATTCCCAA
CACTCTCAACCCAGTCTTTGGCAGGATGTACGAACTGAGCTGCTACTTACCTCAAGAAAAAGACCTGAAAAATTTT
TGTCTATGATTATGACACCTTTACCCGGGATGAAAAAGTAGGAGAAACAATTATTGATCTGGAAAACCGATTCTT
TTCCCGCTTTGGGTCCCCTGCGGCATACCAGAGGAGTACTGTGTTTCTGGAGTCAATACCTGGCGAGATCAACT
GAGACCAACACAGCTGCTTCAAAATGTGCGCCAGATTCAAAGGCTTCCCACAACCCATCCTTTCCGAAGATGGGAG
TAGAATCAGATATGGAGGACGAGACTACAGCTTGGATGAATTTGAAGCCAAACAAAATCCTGCACCAGCACCTCGG
GGCCCCGTAAGAGCGGCTTGCTCTTACATCCTCAGGACTCAGGGGCTGGTCCCTGAGCACGTGGAAACAAGGAC
TTTGACAGCACCTTCCAGCCCCAACATTTCCCAGGGAAAACTTCAGATGTGGGTGGATGTTTTCCCCAAGAGTTT
GGGGCCACCAGGCCCTCCTTTCAACATCACACCCCGGAAAGCCAAAGAAATACTACCTGCGTGTGATCATCTGGAA
CACCAAGGACGTTATCTTGGACGAGAAAAGCATCACAGGAGAGGAAATGAGTGACATCTACGTCAAAGGCTGGAT
TCCTGGCAATGAAGAAAACAAACAGAAAACAGATGTCCATTACAGATCTTTGGATGGTGAAGGGAATTTTAACTG
GCGATTTGTTTTCCCGTTTACTACCTTCCAGCCGAACAACTCTGTATCGTTGCGAAAAAGAGCATTCTCTGGAG
TATTGACCAACGGAATTTTGAATCCCACCCAGGCTGATCATTAGATATGGGACAATGACAAGTTTTCTCTGGA
TGACTACTTGGGTTTCTAGAACTTGACTTGCGTCACACGATCATTCCTGCAAAATCACCAGAGAAATGCAGGTT
GGACATGATTCCGGACCTCAAAGCCATGAACCCCTTAAAGCCAAAGACAGCCTCCCTCTTTGAGCAGAAGTCCAT
GAAAGGATGGTGGCCATGCTACGCAGAGAAAGATGGCGCCCGCGTAATGGCTGGGAAAGTGGAGATGACATTGGA
AATCCTCAACGAGAAGGAGGCCGACGAGAGGCCAGCCGGGAAGGGGCGGGACGAACCCAACATGAACCCCAAGCT
GGACTTACCAATCGACCAGAAACCTCCTTCTCTGTTTACCAACCCATGCAAGACCATGAAGTTTATCGTGTG
GCGCCGCTTTAAGTGGGTATCATCGGCTTGCTGTCTCTGCTTATCCTGCTGCTCTTCGTGGCCGTGCTCCTCTA
CTCTTTGCCGAATATTTGTCAATGAAGATTGTAAAGCCAAATGTGTAACAAAGGCAAGGCTTCATTTCAAGAG
TCATCCAGCAATGAGAGAAATCCTGCCTCTGTAGACCAACATCCAGTGTGATTTTGTGTCTGAGACCACACCCAG
TAGCAGGTTACGCCATGTACCGAGCCCCATTGATTTCCAGAGGGTCTTAGTCCTGGAAAGTCAGGCCAACAGC
AACGTTTGCATCATGTTATCTCTTAAGTATTAAGTTTATTTTCTAAAGTTTAAATCATGTTTTTCAAAATAT
TTTTCAGGTTGGCTGGTTCCATTTAAAAATCATCTTTTATATGTGTCTTCGGTTCTAGACTTCAGCTTTTGGAA
ATTGCTAAATAGAATTCAAAATCTCTGCATCCTGAGGTGATATCTTCAATCACTGAAAGAGCTG
TGCATTATAAAATCAGTTAGAATAGTTAGAACAATCTTATTTATGCCACAACCAATTGCTATATTTTGTATGGA
TGTATAAAAGTCTATTTAACCTCTGTAATGAAACTAAATAAAATGTTTCACCTTTAAAAAAAAAAAAAAAAAAAA
AAAA

WO 2004/030615

PCT/US2003/028547

3264/6881
FIGURE 3014

MLRVIVESASNIPKTKFGKPDPIVSVIFKDEKKTKKVDNELNPVWNEILEFDLRGIPLDFSSSLGIIVKDFETI
GQNKLI GTATVALKDLTGDQSRSLPYKLISLLNEKGQDTGATIDLVIGYDPPSAPHPNDLSGPSVPGMGDGEED
EGDEDRLDNAVRGPGPKGPVGTVSEAQLARRLT KVKNRRMLSNKPQDFQIRVRVIEGRQLSGNNIRPVVHVHC
GQTHRTRIKRGNNPFFDELFFYNVNMTPELMDIISIRVYNHSLRADCLMGFEKIDVGFVYDEPGHAVMRKWL
LLNDPEDTSSGSKGYMKVSMFVLGTGDEPPPERDRDNDSDVESNLLLPAGIALRWVTFLLKIYRAEDIPQMDD
AFSQTVKEIFGGNADKKNLVDPFVEVSFAGKKVCTNII EKANPEWNQVNLQIKFPSVCEKIKLTIYDWRDLTK
NDVVGTTYLHLSKIAASGGEVEDFSSSGTGAASYTVNTGETEVGFVPTFGPCYLNLYGSPREYTGFPDPYDELNT
GKGEGVAYRGRILVELATFLEKTPPDKKLEPISNDDL LVVEKYQRRRKYSLSAVFHSATMLQDVGEAIQFEV SIG
NYGNKFDTTCKPLASTTQYSRAVFDGNYYYLPWAHTKPVVTLTSYWEDISHRLDAVNTLLAMAERLQTNIEALK
SGIQGKIPANQLAELWLKLIDEVIEDTRYTLPLTEGKANVTVLDTQIRKLRSRSLSQIHEAAVRMRSEATDVKST
LAEIEDWLDKLMQLTEEPQNSMPDIIWMIRGEKRLAYARIPAHQVLYSTSGENASGKYCGKTQITFLKYPQEK
NGPKVPVELRVNIWLGLSAVEKKFNSFAEGTFTVFAEMYENQALMFGKWGTSGLVGRHKFSDVTGKIKLKREFFL
PPKGWEWEGEWIVDPERSLLTEADAGHTEFTDEVYQNESRYPGGDWKPAEDTYTDANGDKAASPSELTCPPGWEW
EDDAWSYDINRAVDEKGEYGITIPPDHKPKSWVAAEKMYHTRRRRLVRKRKKDLTQTASSTARAMEELQDQEG
WEYASLIGWKFWKQRSSDTFRRRRWRRKMAPSETHGAAAFKLEGALGADTTEDGDEKSLEKQKHSATTTFGAN
TPIVSCNFDVYIYHLRCYVYQARNLLALDKDSFSDPYAHICFLHRSKTTEIIHSTLNPTWDQTIIIFDEVEIYGE
PQTVLQNPVKVIMELFDNDQVGKDEFLGRSIFSPVVKLNSEMDITPKLLWHPVMNGDKACGDVLVTAELILRGKD
GSNLPILPPQRAPNLYMVPQGIRPVVQLTAIEILAWGLRNMKNFQMASITSPSLVVECGGERVESVVIKNLKKTP
NFPSSVLFMKVFLPKEELYMPPLVIKVIDHRQFGRKPVVGQCTIERLDRFRCDPYAGKEDIVPQLKASLLSAPPC
RDIVIEMEDTKPLLASKLTEKEEEIVDWWSKFYASSGEHEKCGQYIQKGYSKLKIYNCELENVAEFEGLTDFSDT
FKLYRGKSDENEDPSVVGFEKGSFRIYPLPDDPSVPAPPRQFRELPSVFPQECTVRIYIVRGLELQPDNNGLCD
PYIKITLGKKVIEDRDHYIPNTLNPVFGMYELSCYLPQEKDLKISVYDYDTFTRDEKVGETIIDLENRFLSRFG
SHCGIPEEYCVSGVNTWRDQLRPTQLLQNVARFKGFPQPI LSEDGSRIRYGGRDYSLDEFEANKILHQHLGAPEE
RLALHILRTQGLVPEHVETRTLHSTFQPNISQGKLQMWVDVFPKSLGPPGPPFNITPRKAKKYLRVIIWNTKDV
ILDEKSITGEEMSDIYVKGWIPGNEENKQKTDVHYRSLDGEENFNWRFVFPFDYLPAEQLCIVAKKEHFWSIDQT
EFRIPPRLI IQIWDNDKFSLDDYLGFLDLRHTIIPAKSPEKCRDLMIPDLKAMNPLKAKTASLFEQKSMKGWW
PCYAEKDGARVMAGKVEMTLEILNEKEADERPAGKGRDEPNMNPKLDLPNRPETSFLWFTNPKCTMKFIVWRRFK
WVIIGLLFLLILLFFVAVLLYSLPNYLSMKIVKPNV

WO 2004/030615

PCT/US2003/028547

3265/6881
FIGURE 3015

GTGTGGACAACAGTGAGTATATGGGGAATGGAGACTTCTTACCCACCCGGCTGCAGGCCAGCAGGATGCTGTCA
ACACAGTTTGTCAATCAAAGACCCGAGCAACCCTGAGAACAACGTGGGCCTTATCACACTGGATAATGACTGTG
AAGTGCTGACCACACTCACCCAGACACTGGCCGTATCCTGTCCAAGCTACATACTGTCCAACCCAAGGGCAAGA
TCACCTTCTGCATGGGCATCCACGTGGCCCATCTGGCTCTGAAGCACCGACAAGGCAACAATCACAAGATCCGCA
TCATTGCCTTTGTGGGAAACCCGGTGGAGGACAATGAGAAGAATCTGGTGAACTGGCTAAATGCCTCAAGAAGG
AGAAAGTAAATGTTGACATTATCAATTTTGGGGAAGAGGAGGTGAACACAGAAAAGCTGACAGCCTTTGTAAACA
CGTTGAATGGCAAAGATGGAACCGGTTCTCATCTGGTGACAGTGCCTCCTGGGCCAGTTTGGCTGATGCTCTCA
TCAGTTTTCCGATTTTGGCTGGTGAAGGTGGTGCCATGATGGGTCTTGGTGCCAGTGACTTTGAATTTGGAGTAG
ATCCCAGTGCTGATCCTGAGCTGGCCTTGGTCCTTCGTGTATTTATGGAAGAGCAGCGGCAGCGGCAGGAGGAGG
AGGCCCGGCAGGCAGCTGCAGCTTCTGCTGCTGAGGCCGGGATTGCTACGACTGGGACTGAAGACTCAGACGATG
CCCTGCTGAAGATGACCATCAGCCAGCAAGAGTTTGGCCACACTGGGCTTCTGACCTAAGCAGTATGACTGAGG
AAGAGAAGATTGTTTGTGCCATGCAGATGTCCCTGCAGGGAGCAGAGTTTGGCCTGGCAGAATCAGCAGACATTG
ATGCCAGCTCAGCCATGGACACATCTGAGCCAGCCAAGGAGGAGGATGATTACGACGTGATGCAAGACCCTGAGT
TCCTTCAGAGTGTCTAGAGAACCCTCCCAGGTGTGGATCCCAACAATGAAGCCATTGAAATGCTGTGGGCTCCC
TGGCCTCCCAGGCCACCAAGGACAGCAAGAAGGACAAGAAGGAGGAAGACAAGAAGTGAGACTGGAGGGAAAGGG
TAGCTGAGCCTGCTCAGGGGACTGCATGGGAAGCACGGAATATAGGGTTAGATGTGTGTTATCTGTAATCATTAT
AGCCTAAATAAAGCTTGGCAA

WO 2004/030615

PCT/US2003/028547

3266/6881
FIGURE 3016

GGGGATTGCTAGAAAGGCTGGGCCGGCAGCGGTTGTGAGGAGTTAGCTCGCGGCATTGCAGGCTCTGAGAGGAG
GGGACCCGGTTCCCGGGTGAGTGTCCAGGCATGCCAGCGGAACGGCCCGCGGGCAGCGCGGCTCGGAGGCTCCA
GCAATGGTTGAACAACCTGGACACTGCTGTGATTACCCCGGCCATGCTAGAAGAGGAAGAAGAGCTTGAAGCTGCT
GGACTAGAGAGAGAGCGGAAGATGCTGGAAAAGGCTCGCATGTCTTGGGATAGAGAGTCGACAGAAATTCGGTAC
CGTAGACTTCAACATTTGCTTGA AAAAAGCAATATATACTCCAAATTTTTATTGACGAAAATGGAACAGCAACAA
TTAGAGGAACAGAAGAAGAAAGAAAAATTGGAGAGAAAAAGGAGTCTTTAAAAGTTAAAAGGGTAAAAATTCA
ATTGATGCAAGTGAAGAGAAGCCAGTTATGAGGAAAAAAGAGGAAGAGAAGATGAATCATACAATATTTAGAG
GTCATGTCAAAGAGGAAATTTTGTCTGTGGCTAAAAAAATAAAAAGGAGAATGAGGATGAAAACCTCCTCCTCT
ACTAATCTCTGTGTGGAAGATCTTCAGAAAAATAAAGATTGCAATAGTATAATTAAAGATAGATTGTCTGAAACG
GTTAGGCAGAATACTAAATTTCTTTTTGACCCAGTCCGGAAGTGTAATGGTCAGCCAGTACCTTTCAACAACCA
AAGCACTTCACTGGAGGAGTGATGCGATGGTACCAAGTAGAAGGCATGGAATGGCTTAGGATGCTTTGGGAAAT
GGAATTAATGGCATTTTAGCAGATGAAATGGGATTGGGTAAGACAGTTTCACTGCATTGCTACTATTGCATTGATG
ATTCAGAGAGGAGTACCAGGACCTTTTCTGTCTGTGGCCCTTTGTCTACACTTCCTAAGTGGATGGCTGAATTC
AAAAGATTTACACCAGATATCCCTACAATGTTATATCATGGAACCCAGGAGGAACGTCAAAAATTGGTAAGAAAT
ATTTACAAACGGAAGGGACTTTGCAGATTATCCTGTGGTAATCACGTCATTTGAAATAGCCATGAGAGACCGA
AATGCGTTACAGCATTGCTATTGGAAATACTTAATAGTAGATGAAGGACACAGGATTAAGAATATGAAGTGCCGT
CTAATCAGGGAGTTAAAACGATTCAATGCTGATAACAACTTCTTTTACTGGTACTCCCTTGCAAAACAATTTA
TCAGAACTTTGGTCATTGCTAAACTTTTTGTTGCCAGATGTATTTGATGACTTGAAAAGCTTTGAGTCTTGTTTT
GACATCACTAGTCTTTCTGAAACTGCTGAAGATATTATTGCTAAAGAAAGAGAACAGAATGTATTGCATATGCTG
CACCAGATTTTAACACCTTTCTTATTGAGAAGACTGAAGTCTGATGTTGCTCTTGAAGTTCTCCTAAACGAGAA
GTAGTCGTTTATGCTCCACTTTCAAAGAAGCAGGAGATCTTTTATACAGCCATTGTGAACCGTACAATTGCAAAAC
ATGTTTGGATCCAGTGAGAAAGAAACAATTGAGTTAAGTCCTACTGGTCGACCAAAACGACGAAGTAGAAAATCA
ATAAATTACAGCAAAATAGATGATTTCCCTAATGAATTGGAAAACTGATCAGTCAAATACAGCCAGAGGTGGAC
CGAGAAAGAGCTGTTGTGGAAGTGAATATCCCTGTAGAATCTGAAGTTAATCTGAAGCTGCAGAATATAATGATG
CTACTTCGTAAATGTTGTAATCATCCATATTTGATTGAATATCCTATAGACCCTGTTACACAAGAATTTAAGATC
GATGAAGAATTGGTAACAAATTTCTGGGAAGTTCTTGATTTTGGATCGAATGCTGCCAGAACTAAAAAAAAGAGGT
CACAAGGTGCTGCTTTTTTACAAATGACAAGCATGTTGGACATTTTGATGGATTACTGCCATCTCAGAGATTTT
AACTTCAGCAGGCTTGATGGGTCCATGTCTTACTCAGAGAGAGAAAAAACATGCACAGCTTCAACACGGATCCA
GAGGTGTTTTATCTTCTTAGTGAGTACACGAGCTGGTGGCCTGGGCATTAATCTGACTGCAGCAGATACAGTTATC
ATTTATGATAGTGATTGGAACCCCGAGTCGGATCTTCAGGCCAGGATAGATGTCATAGAATTGGTCAGACAAAG
CCAGTTGTTGTTTTATCGCCTTGTTACAGCAAATACTATCGATCAGAAAATTGTGGAAGAGCAGCTGCTAAAAGG
AACTGGAAAAGTTGATCATCCATAAAATCATTTCAAAGGTGGTCAGTCTGGATTAAATCTGTCTAAGAATTTT
TTAGATCCTAAGGAATTAATGGAATTATTAATACTAGAGATTATGAAAGGGAAATAAAAAGGATCAAGAGAGAAG
GTCATTAGTGATAAAGATCTAGAGTTGTTGTTAGATCGAAGTGATCTTATTGATCAAATGAATGCTTCAGGACCA
ATTAAAGAGAAGATGGGGATATTCAAGATATTAGAAAATCTGAAGATTCCAGTCTGAATGTTTGTGTTTTAAAGT
GGAGCTCAAGAATAGCTTTTAAAAGTTCTTATTTACATCTAGTGATTTCCCTGTATTGGGTTTGAAATACTGATT
GTCCACTTCACCTTTTTTATTATATCAGTTGACATGTAAGTACTAGTACCATGCGTACTTAAATAGATGGTAATTTT
TGAGCCTTACCAAGAACAAAGAAGTATCCATATTAAGTTTAGATTTTCAGTTAATTTTTGAGACTGAGTAGTATT
CTTGGATACAGGCTGATGTGTAATTAACACTTCCAGATTTATACAGTCTTCCCTGTGGAAGTTTAGTAAATGTCT
TTTTCCCTCCTTTCTTCTAGTAATGCAGTTTATGGGCTTTAGGTACTTCAGTTATGAAGTAGGCTTTTCATGGGG
AGAGATTGGGATTATGCTCTCTGTGTTTAAAGAACTGTTTGATTTTAGAGTCTATTTCTATGAGATAGTTTACC
AAATAAATGTTCTTATAAG

WO 2004/030615

PCT/US2003/028547

3267/6881
FIGURE 3017

GCCCGCGCCGCGCCGCTCTTTCTCCGACAGCTGCCGGGGTGCCCTGCAAGCTGTTCCGCGCGTCCTGCCCGTCT
GTCCCCGCGGGTCGTGCCCCGCCACAGCCGCGCCATGACCACCCAGCAGATAGACCTCCAGGGCCCCGGGGCCGTG
GGGCTTCCGCTCGTGGGCGGCAAGGACTTCGAGCAGCCTCTCGCCATTTCCCGGGTCACTCCTGGAAGCAAGGC
GGCTCTAGCTAATTTATGTATTGGAGATGTAATCACAGCCATTGATGGGGAAAATACTAGCAATATGACACACTT
GGAAGCTCAGAACAGAATCAAAGGCTGCACAGACAACCTTGACTCTCACTGTAGCCAGATCTGAACATAAAGTCTG
GTCTCCTCTGGTGACGGAGGAAGGGAAGCGTCATCCATAAAGATGAATTTAGCCTCTGAACCCCAGGAGGTCTT
GCACATAGGAAGCGCCACAAACCGAAGTGCCATGCCCTTTACCGCCTCGCCTGCCTCCAGCACTACTGCCAGGGT
CATCACAAACAGTACAACAACCCAGCTGGCCTCTACTCTTCTGAAAATATCTCCAACCTCAACAATGCCCTGGA
GTCAAAGACTGCTGCCAGCGGGGTGGAGGCGAACAGCAGACCCTTAGACCATGCTCAGCCTCCAAGCAGCCTTGT
CATCGACAAAGAATCTGAAGTTTACAAGATGCTTCAGGAGAAACAGGAGTTGAATGAGCCCCCGAAACAGTCCAC
GTCTTTCTTGGTTTTGCAGGAAATCCTGGAGTCTGAAGAAAAAGGGGATCCCAACAAGCCCTCAGGATTGAGAAG
TGTTAAAGCTCCTGTCACTAAAGTGCTGCGTCGATTGGAAATGCTCAGAAGTTGCCTATGTGTGACAAATGTGG
CACTGGGATTGTTGGTGTGTTTGTGAAGCTGCGGGACCGTCACCGCCACCCTGAGTGTATGTGTGCACTGACTG
TGGCACCAACCTGAAACAGAAGGGCCATTTCTTTGTGGAGGATCAAATCTACTGTGAGAAGCATGCCCGGGAGCG
AGTCACACCACCTGAGGGTTATGAAGTGGTCACTGTGTTCCCAAGTGAGCCAGCAGATCTGACCCTGTTCTCC
AGCAGGCCTCTGCTGCAGCTTTTTCTCTCAGTGTTCTGGCCCTCTCCTCTCTTGAAAGTTCTCTGCTTACTTTGG
TTTTCCCTCTGCTTGTAACAACTTGAGTCCCCTCCCTGCCTTGGTTAATTGACTCACACCAGCTGTGCGATGCC
GCTTTTACAATTAAAGGAAAACCTGTTTTGTTTCAAGTGTACCTTGTGAGCAACACTGTGTCCCTTCGCCCCACCGT
TCTTCTCTGCTGCATTTGGACATCAGCCAAATTTGAACCCAATCAAATATAACGTGTCTGACACTGATTTTGT
TTACTCAATAAATGTATAGACTACAAAAA

WO 2004/030615

PCT/US2003/028547

3268/6881
FIGURE 3018

MTTQQIDLQGGPWGFRVLVGGKDFEQPLAISRVTPGSKAALANLCIGDVITAIDGENTSNMTHLEAQNRIKGCTD
NLTLTVARSEHKVWSPLVTEEGKRHPYKMNLASEPQEV LHIGSAHNRSAMPFTASPASSTTARVITNQYNNPAGL
YSSENISNFNNALESKTAASGVEANSRPLDHAQPPSSLVIDKESEVYKMLQEKQELNEPPKQSTSFLVLQEILES
EEKGDPNKP SGFRSVKAPVTKVAASIGNAQKLPMCDKCGTGIVGVFVKLRDRHRHPECYVCTDCGTNLKQKGHFF
VEDQIYCEKHARERVTPPEGYEVVTVFPK

WO 2004/030615

PCT/US2003/028547

3269/6881
FIGURE 3019

ATGGAAGATTGATGGACATGGACGCCGACAAAGATGATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAG
TTATCCTTAAGAACGCCAACAGTTTCCCTTGGGGTCTTTGAAATAACACCACCAGTGCTTTTATGGTTGAAGTGT
GGTTCAGGGCCAGTGCAATATTAGTGGACAGCATTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAG
GAGGAGGATGTGAAACTCTTAAGGATATCTGGAAAATTAAAAGGACAAGAATCCTTCAAAAAACAGGAAAAAACT
CGTAAAAACACCAAAAGGGCCTAGTTCTGTAGAAGACATTAAATCAAAAATGCAAGCAAGTATAGAAAAAGGTGGT
TCTCTTCCCAAATGGAGGAAGTCTCTTTAG

WO 2004/030615

PCT/US2003/028547

3270/6881
FIGURE 3020A

ATTCTGGCTGTGACTCAGTCACTGACACTGAGCCTGAGGACGAGAAGGTTGTTTCCTACTCGAAGCAGCAGAACC
TGCCGACGGTGACTTCACCTGGGAACCTGATGGTGGTGACAGCCGGACCGCATTGCTGTGGGGCAGAAACCACTG
TCTATGTTATTGTGAGATGTAAGCTGGATGACAGGGTGGCGACAGAAGCAGAGTTTTCTCCTGAGGATTCTCCCT
CTGTAAGGATGGAAGCCAAGGTGGAGAATGAGTACACCATTTCAGTGAAGGCTCCCAACCTTTTCATCTGGGAACG
TTTCTCTGAAGATATATTCTGGAGACTTAGTGGTGTGTGAAACCGTTATCAGCTATTATACTGACATGGAAGAAA
TTGGGAATTTATTGTCCAATGCCGCGAATCCTGTGGAATTCATGTGTGAGGCCTTTAAAATTGTGCCCTACAACA
CAGAGACCCTTGATAAATGCTAACC GAATCCCTGAAGAACAAATATCCCTGCAAGCGGACTGCACCTCTTTGGAA
TCAACCAGCTGGAAGAAGAAGATATGATGACAAATCAGAGGGATGAAGAGCTGCCACCCTGTTGCATTTTGCTG
CGAAGTATGGACTGAAGAACCTCACTGCCTTGTTGCTCACCTGCCAGGAGCCCTGCAGGCGTACAGCGTGGCCA
ACAAGCATGGCCACTACCCCAACACCATCGCTGAGAAACACGGCTTCAGGGACCTGCGGCAGTTTCATCGACGAGT
ATGTGGAACCGGTGGACATGCTCAAGAGTCACATTAAAGAGGAACGTATGCACGGGGAGGAGGCTGATGCTGTGT
ACGAGTCCATGGCCACCTTTCCACAGACCTGCTTATGAAATGCTCGCTCAACCCCGGCTGTGACGAGGATCTCT
ATGAGTCCATGGCTGCCTTTGTCCAGCTGCCACTGAAGACCTCTATGTTGAAATGCTTCAGGCCAGTACATCTA
ACCCAATCCCTGGAGATGGTTTTCTCTCGGGCCACTAAGGACTCTATGATCCGCAAGTTTTTAGAAGGCAACAGCA
TGGGAATGACCAATCTGGAGAGAGATCAGTGCCATCTTGGTCAGGAAGAAGATGTTTATCACACGGTGGATGACG
ATGAGGCCTTTTTCTGTGGACCTGGCCAGCAGGCCCTGTCCAGTGCCAGACCAGAGACCACTGCTCCTGGTG
CTCACCAGCTGCCTGACAACGAACCATAACATTTTTAAAGTTTTTGCAAAAAAAGTCAAGAGCGGCCCTGGGAATT
TCTACGTTTTCTCAGAGAGCATCAGGAAAGGGCCGCCCTGTCAGACCATGGAGGGACAGGCCCCAGTCGAGTATAT
ATGACCCTTTTTGCGGGAATGAAACGCCAGGCCAGCGGCAGCTTATCACCTCCAGGAGCAGGTGAAGCTGGGCA
TTGTCAACGTGGATGAGGCTGTGCTCCACTTCAAAGAGTGGCAGCTCAACCAGAAGAAACGATCGGAGTCCTTTC
GTTTCCAGCAGGAAAAATCTTAAACGGCTAAGAGACAGCATCACCCGAAGACAGAGAGAGAAGCAAAAAATCAGGAA
AGCAGACAGACTTGGAGATCACGGTCCCAATTTCGGCACTCACAGCACCTGCCTGCAAAAAGTGGAGTTTGGAGTCT
ATGAGAGTGGCCCCAGGAAAAGTGTCAATTCCCCCTAGGACGGAGCTGAGACGAGGAGACTGGAAAAACAGACAGCA
CCTCCAGCACAGCAAGTAGCACAAGTAACCGCTCCAGCACCCGGAGCCTCCTCAGTGTGAGCAGCGGGATGGAAG
GGGACAACGAGGATAATGAAGTCCCTGAGGTTACCAGAAGTCGCAGTCCAGGCCCCCCACAAGTGGATGGGACAC
CCACCATGTCCCTCGAGAGACCCCCAGGGTGCCTCCGAGAGCTGCCTCACAGAGGCCTCCGACCAGGGAGACCT
TCCATCCTCCTCCACCTGTTCCACCCAGAGGACGCTGATTCCACCTCCTAAAACCTGCCTACTTCAGGACTTTAA
GACTCACAGTCTTCAGCCTGTTAATGATGTCTTCATGTTGAGTTTTATAGCATGACTGTTGACCTTAAGATCCAT
TCTCATTGCTGATAATGCTGCAGCCCTGCTGGTTTTGGGCTTGCTCGAAGATTTTTATTAAGGCACGAAGAAGTGA
AAAATAAGGGCTTCATTACCATCACCAAGTATATCGAACCATATACTTGTGTTGCCAAAAGGATGAAGACTTAA
TCGAAATACTTACCTCTAATTTGCCATATCAGAAGCCTAAAAGAATGATCATAAATGTACTTCACCAGTGATTT
TACTGAAATGCACTTATATTAGTCTTTATGTATTTGCTAGTTTCAGCCTGATTTCTAGAAGAGGTTATAGTGTGAG
ACTGTAGTATTCAAGTAAGATAAGTGACCTAATTTTAAATAATTCTTCTACTTTTCTGTATATTACAGCAGGGT
ATTTAAGTGCTAGGGCTGGTCACACACAACCAACTGAAAAAGACTAGAGGGATTAGTACAAACTCCTCTTATACA
GAAGGCAAATCTGAGGTTCCACAGAAGTCTGGAACCAAGACTATTAGTTGGTTAAATAAAGAGGTTAGTCTAGA
CTGGGCCTGCTCATTCTAGGTCACCACATTTCCATCTCCAAATAGCCAGGCCCTCTCTCCCTCAAGAAATGCCC
AGATGTAGAAATTCATCAGTGCCTATTGGTCTTCCAGAATTTTCCATCTTCCGTATCTCCAGGCATGAGACTAC
CAAGTTTGTTTGTGTTTTCTTTCCAATTTGGGAATTTATACTTCAGTATGGTTTCAACGCAGTTATGTTTCCAGAGA
ACATCTAGAAGTGGCTGGAAACCAGAAGCTGGGGATTCCAGGGACCCCACTTAGTGCTCTATTTCTTTTATAGGT
TTTATTTCTGGTCATAGAGAGAGAAGGACCTTTGACTTTTTCTTCGTTGAGGCTTCTGAGGAGGAAAAACAAACC
TAAATAGAAATACAGTCAGCCTTTCAAATCCATGGGTTCTGTGTCCGTGGATTCAACCAACCTTGGATCAAAAA
TATTTGAAAAAATACTACAAAGTTTCAAAAAGCAAACTTGAATTTGCTGCATGCCAAGAAGTATGTTGAATTC
ATGTAAATGAAGTGATGTGTAGGCATTGTATTAGATATTATAAGAAATCTAGAAATGATTTAAAGCATACAGGAG
GATGTGCATAGGTTATATGCAAAATACATGCTATTTTATATATAGGACTTGAGCATTGTTGGATTGTTGATACTGG
GGGATCCTGGAACCAATCCCCATGGATACCAAAAGTACACTGTAGTTATCTATTTTTTACATATTATTATTAC
CACCATGCTCAGTAAGTCCATTTTTGTCATGGAATATGGAGCCTTAAACATGTGCATGAATTTGGAGTCCCTGGCA
CATAAATCTACCTTCAAATCAGAGGTCCTTAATGATGCCTAAACATACAGTAAATTAGAATCAGAAATACTTCT
TTAAAAAATATTCAAATGTGTTTGTGTTTCCCATGGGATTATTCTCTATCCACACGAATGTAAAAAATCCACAT

WO 2004/030615

PCT/US2003/028547

3271/6881
FIGURE 3020B

TAATGATCCATTTAAGTATAGTTTTATTGGGTCCTTTTCTAATGATTAAAGGTTCTTTCTCAATTTTCATTCCTCA
GTCCTGCAAGTAAGGACTCATACTGAAGAGTACTGAAACAAGGACTTCTTGTCAGAAACAGCTTCTGGAATCTTG
GGTTTTGTTTTGTTTTTTGACAAAATACACTATTGGCCATGTCCATCACGAGAGTGTGTTAGTAATTAATTAC
CTTGACAGGACCTGGCACTTAGTAGCATTCTTCAAATGTTCCCTCAGTGATCCTTTTACTCTCCTTGTCACCTTA
TTTGGGAGAAATAGGGGCACGTGAGATAAGAAGAAGAATAATTTTGATGTTGGTATGCTTGCCCTGTTACTTATA
GACAGTCTTTGTCATAGGCAAACTTGAATTTGATTTAAAATAGGGCTGGGAAAAATATTCAATAACTGTAAGCCC
CCTTTTGGATGCCAAACTTAGAATTTTGATATTCTCTGATGAACAAGCATTTAGATCGTAACATGGTAAAGCCT
ATTACCAGCCAATGTTGTTAGCATCTTTGTATGCACATCACTGTTTGCAATATATGAATATTTTGTTCATTG
TATTCTTATATAAAAAATAAGTAGAAAACATAAAATTGAAATTGCTGATGAGAAGCCTTGCTCTCGTGAATGTGATA
CACTTGAGACACGGATGGAAGTATCAGGAGTGCCAAGTCAAAGCAGCAGATCTTAAGCCCTCACTGGTTGTTT
CTTTAACATCCAAAATGGTTGGTTATATGTAAAAGAAGAAAATGAAATAATCTGGATGAAACACTGGGACTGTGT
TATCAAAGAATGTCTGTAGTGATGAGGTGAAAATTTTCATTTTCCAGAAACAGAACTGCTCATTATATAACATAAA
TATATTCAACTTCCACA

WO 2004/030615

PCT/US2003/028547

3272/6881
FIGURE 3021

MVVQPDRIRCGAETTVYVIVRCKLDDRVATEAEFSPEDSPSVRMEAKVENEYTISVKAPNLSSGNVSLKIYSGDL
VVCETVISYYTDMEEIGNLLSNAANPVEFMCQAFKIVPYNTETLDKLLTESLKNNIPASGLHLFGINQLEEDMM
TNQRDEELPTLLHFAAKYGLKNLTALLTCTPGALQAYSVANKHGHYPNTIAEKHGFRDLRQFIDEYVETVDM LKS
HIKEELMHGEEADAVYESMAHLSTDLLMKCSLNP GCDEDLYESMAAFVPAATEDLYVEM LQASTSNPIPGDGFSR
ATKDSMIRKFLEGNSMGMTNLERDQCHLGQEEDVYHTVDDDEAFSVDLASRPPVPVPRPETTAPGAHQLPDNEPY
IFKVFAEKSQERPGNFYVSSSESIRKGPPVRPWRDRPQSSIYDPFAGMKTPGQRQLITLQEQVKLGIVNVDEAVLH
FKEWQLNQKKRSESFRFQQENLKRLRDSITRRQREKQKSGKQTDLEITVPIRHSQHLPKVEFGVYESGPRKSVI
PPRTELRRGDWKTDSTSSTASSTSNRSSTRSLLSVSSGMEGDNEDNEVPEVTRSRSPGPPQVDGTPMSLERPPR
VPPRAASQRPPPTRETFHPPPPVPPRGR

WO 2004/030615

PCT/US2003/028547

3273/6881
FIGURE 3022

CGAAGATGGCGGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCGCCTGGCGGCCATCGTGG
CTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTTGTACGCTGTGAAGGCATCAACATTTCTGGCAATTTCTACA
GAAACAAGTTGAAGTACCTGGCTTTCTCCGCAAGCGGATGAACACCAACCCTTCCCGAGTCCCCTACCACTTCC
GGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAGACCAAGCGAGGCCAGGCCGCTC
TGGACCGTCTCAAGGTGTTTGACGGCATCCCAACGCCCTACGACAAGAAAAAGCGGATGGTGGTTCTTGCTGCC
TCAAGGTCGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCACGAGGTTGGCTGGAAGT
ACCAGGCAGTGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTACCGGAAGAAGAAACAGC
TCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACACAGAGGTCCTCAAGACCC
ACGGACTCCTGGTCTGAGCCCAATAAAGACTGTTAATTCCTAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAA

WO 2004/030615

PCT/US2003/028547

3274/6881
FIGURE 3023

MAEVQVLVLDGRGHLLGRLLAIVAKQVLLGRKVVVVCCEGINISGNFYRNKLNylaFLRKRMNTSPSRGPYHFRA
PSRVFWRTVRGMLPHKTKRGQAALDRLKVSDGIPPPYDKKKRMVVPAAALKVVRLKPTRKFAYLGRLAHEVGWKYQ
AVTATLEEKRKEKAKIHYRKKKQLMRLRKQAEKNVEKKIDKYTEVLKTHGLLV

PCT/US2003/028547

GGCACGAGGCACAGTGGGTTCTGAGCGTGTTTCTACGTCCTCGGAAGGCCGGTCAATTTAAAGCTCAATTCCTCGCCACG
GCTTAGTCAACATGGGTCGCTCGGGAAAGTTGCCCTCTGGTGTCTCAGCTAAGTTGAAGCGCTGGAAGAAAGGCC
ACAGCAGCGACAGCAACCCCGCCATCTGCCGCCACCGTCAGGCCGCCCGCAGCCGCTTCTTCAGCCGGCCGTCAG
GAAGGAGTGACCTGACAGTCGATGCTGTGAAGTTACATAATGAGCTGCAGTCAGGGTCCTTGCGCTTGGGCAAAA
GCGAAGCCCCGGAGACGCCCATGGAAGAAGAGGCGGAGCTGGTTCTACCGAGAAGTCCTCGGGTACCTTCCTGA
GTGGCCTTTCCGACTGCACAAACGTCACCTTCAGCAAAGTACAGCGCTTCTGGGAGTCCAACCTCGGCTGCCACA
AGGAGATCTGTGCTGTTCTGGCTGCTGTCACTGAGGTGATTGCTCCAGGGAGGGAAGGAGACGGGAGACTGAGT
ACTTCGCTGCTCTGATGACAACAATGGAAGCAGTGGAGTCCCCGGAGTCCCTGGCCGCCGTTGCTTACCTGCTGA
ACCTTGCTCTGAAGCGTGTTCCACGCCCTGTGCTTATTAAGAAGTTCTCTGATACCTCCAAGCCTTCATGGATA
TCATGTCAGCTCAGGCCAGCAGCGGCTCCACCTCTGTCTCCGATGGGTCTTTCTGCTGGCCACCCTTCTGC
GGAAGCAAGACCTGGAGGCTGGGGCTACCCCGTGACCTTCAGGTGTACCATGGGTGCTGAGCTTCACGGTGC
ATCCCAAGCCCCAAGATCCGGAAGGCTGCCCAGCATGGAGTATGCTCAGTCCTCAAGGGCAGTGAATTCATGTTG
AAAAGGCCCTTGGCCATCATCCTGCTGCCATTTCCACTGCCAAGTTCTGCATCCAGGAGATTGAGAAGTCTGGAG
GCTCCAAGGAGGCCACCACCACGCTGCACATGCTGACGCTGCTGAAGGACCTGCTGCCCTGCTTCCCGGAAGGCC
TGGTGAAGAGCTGCAGTGAGACTCTCTCAGGGTCATGACCTTGAGCCATGTGCTGGTGACAGCCTGTGCCATGC
AGGCCTTTTACAGCCTCTTCCACGCCAGGCTGGCCTGAGCACCTGTGACGAGAGCTCAACGCCCAGATCATCA
CGGCCCTGTACGACTATGTTCCAGTGAGAATGATTTACAACCCCTGCTAGCCTGGCTTAAGGTCATGGAGAAAG
CCCACATCAACCTGGTGAGGTTGCAGTGGGACCTGGGGCTAGGCCACCTCCCTCGCTTTTTTGGAACTGCGGTGA
CCTGCCTCCTTTCCCCACACTCGCAAGTGTGACTGCTGCTACGCAGAGCCTCAAGGAGATCCTGAAGGAATGCG
TGGCTCCCCACATGGCTGACATTGGCTCCGTGACCTCCTCGGCCTCAGGCCCTGCCCAATCTGTTGCCAAGATGT
TCAGGGCAGTGGAGGAGGGCCTGACGTACAAATTCCATGCGGCCTGGAGCTCCGTGTTGCAGCTGCTGTGTGTCT
TCTTCGAGGCGTGTGGGAGACAGCCCCACCCTGTGATGAGGAAGTGCCTCCAGTCCCTGTGTGACCTGCGCCTCT
CCCCTCATTTCCCCCACACGGCGGCTCTTGACCAGGCAGTGGGGGCTGCGGTGACCAGTATGGGACCTGAGGTGG
TGCTGCAGGCTGTGCCTTTGGAAATTGATGGCTCTGAGGAGACTCTGGATTTCCACGGAGCTGGCTGCTGCCTG
TCATCCGAGACCATGTTCAGGAAACGCGACTTGGTTTTTACCACCTACTTCTTGCCCCTGGCTAACACCCTGA
AGAGCAAAGCCATGGACCTGGCTCAGGCAGGCAGCACAGTGAATCTAAGATCTACGACACACTCCAGTGGCAGA
TGTGGACACTCCTGCCTGGGTTCTGCACAAGGCCTACAGATGTGGCCATCTCCTTCAAAGGGCTGGCACGGACGC
TGGGCATGGCCATCAGCGAGCGTCCAGACCTGAGGGTCACCGTGTGCCAGGCCCTGCGCACCCCTCATCACC AAGG
GCTGCCAGGCAGAGGCTGACCGTGCTGAAGTGAGTCGCTTGGCAAAGAACTTCTGCCGATCCTCTTCAACCTGT
ATGGGCAGCCCGTGGCAGCCGGGGACACTCCAGCCCTCGCCGGGCTGTGCTGGAAACCATCAGAACTTACCTCA
CCATCACTGACACTCAGTTGGTGAACAGTCTCCTGGAAAAAGCCAGTGAGAAGGTGCTCGACCCTGCCAGCTCTG
ACTTTACCAGATTGTCTGTCTTGGACCTGGTCGTGGCCTTGGCTCCGTGTGCTGACGAAGCTGCCATCAGTAAGC
TATACTCCACCATCCGGCCCTACCTAGAGAGCAAGGCCACGGGGTGAGAAAGAGGCTTACCAGTGTGGAGG
AGGTGTGTGCCAGTCTCAGGGCCCCGGGGCCCTCTTCGTGCAGAGCCACCTGGAGGACCTGAAGAAGACACTGC
TGGACTCGCTGCGGAGCACCTCCTACCCGCCAAGAGGCCCGTTTGAAGTGCCCTCTACACATCGTGAGGAAGC
TCTCAGCTGAACACAAGGAGTTCATCACTGCCCTCATCCCAGAGGTGATCCTGTGCACCAAGGAGGTGTCGGTGG
GCGCACGGAAGAAGCGTTTTGCACTGCTCGTGGAGATGGGCCATGCTTTCCTAAGGTTTGGCTCGAACCAGGAAG
AGGCCCTGCAGTGCTACCTCGTCTGATCTACCCTGGCCTGGTGGGCGCGGTGACCATGGTCAGCTGCAGCATCC
TGGCCCTGACCCACCTCCTTTTCGAGTTTAAAGTCTGATGGGGACCAGTACAGTGGAGCAGCTGCTGGAGAATG
TGTGCCTGCTTCTGGCCTCCCGCACCCGTGACGTGGTCAAGTCTGCACTGGGCTTCATCAAGGTGGCAGTGA
TCATGGACGTGGCGCACCTGGCCAAACATGTGCAGTGGTGAAGGCCATTGGGAAGCTTTCAGATGACATGC
GGCGGCACCTCCGATGAAGCTTCCGAACCTGTTACCAAGTTCATCCGCAAGTTTGGATTGAGCTGGTGAAAA
GGCTGTTGCCCGAGGAGTACCACAGAGTCTGGTCAACATCCGGAAGAGTGAAGCCCGGCCAAGAGGCACCGAG
CCCTGAGCCAGGCTGCCGTGGAGGAGGAAGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
GCATTGAGGAGATTTTAGCTGACTCAGAGGACGAGGAGGACAATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
AGCGGAAGCTGGCACGACAGAGGAGGCCGGGCATGGCTGAAAGAGGGCGGTGGGGACGAGCCCTCAACTTCTGG
ATCCCAAGGTGGCCCAACGAGTCTTGCCACGCGACGCCAGGGCCAGGCCGGGGCAGGAAGAAGGACCACAGCTTCA
AGGTGAGCGCCGATGGCCGGCTGATCATAAGGGAGGAGGCAGACGGCAACAAGATGGAGGAAGAGGAAGGTGCCA

WO 2004/030615

PCT/US2003/028547

3276/6881
FIGURE 3024B

AAGGCGAAGATGAAGAGATGGCTGACCCAATGGAAGATGTGATCATCAGGAATAAAAAGCACCAGAAGCTCAAGC
ACCAGAAAAGAGGCTGAGGAGGAGGAGCTGGAGATACCCCCTCAGTACCAAGCTGGAGGCTCTGGCATTTCATCGCC
CTGTGGCCAAGAAGGCTATGCCTGCGGCTGAATACAAGGCCAAGAAAGCAAAAGGTGATGTGAAGAAGAAAGGCC
GGCCGGATCCCTATGCCTACATCCCCCTCAACAGAAGCAAGCTCAACCGCAGGAAGAAGATGAAGCTGCAGGGAC
AGTTCAAAGGCCTGGTGAAGGCTGCGCGGCGAGGTTCCCAGGTGGGACACAAAAACCGCAGAAAGGATCGTCGAC
CCTGAGGCCCCAGGGCCCCCTGGGCTGCCCTGTGGTCCAGTCTGAGGCCCTTTCAGCCCCCAGGCTGCCTTGCCACC
AGCTCCAGGTGCTCAAGATTCTGGCAGAGCCTGGACTCAGGATGACTTGGAAGTGGGCTTGCTCTCAGAAGTC
CTGGATTTTGGAACTCCAAATGGAATCACCCCTTCAGAGACATCCCTGGTGCCTGGAGATGGGAATGTGGCCTCA
GTGCCTCTGAGTAGGTGCCATGAGGCACCTTTGCTTTCTGCCCAGAGTGGCCATGAGCACCAGAACAGATGATCT
CCATTTCCGCCAGCTGCCTGTAGCCACGTGGCATCCTGCCTGTGGTCTGGGTGAGATTTACTGTGACCAGATGTA
GAATAAATGTGTCTCATCCTGCAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3277/6881
FIGURE 3025

MGRSGKLP SGVSAKLKRWKKGHSSDSNPAICRHRQAARSRFFSRP SGRSDLTVD AVKLHNELOSGSLRLGKSEAP
ETPMEEEAELVLTEKSSGTFLLSGLSDCTNVTF SKVQRFWESNSAAHKEICAVLAAVTEVIRSQGGKETETEFYFAA
LMTTMEAVESPESLAAVAYLLNLVLKRVPSPVLIKKFSDTSKAFMDIMSAQASSGSTSVLRWVLSCLATLLRKQD
LEAWGYPTVLQVYHGLLSFTVHPKPKIRKAAQHGVCSVLKGSEFMFEKAPAHHPAAISTAKFCIQEIEKSGGSKE
ATTLHMLTLLKDLLPCFPEGLVKSCSETLLRVMTLSHVLVTACAMQAFHSLFHARPGLSTLSAELNAQII ITALY
DYVPSENDLQPLLAWLKVMEKAHINLVRLQWDLGLGHLPRFFGTAVTCLLSPHSQVLTAAATQSLKEILKECVAPH
MADIGSVTSSASGPAQSVAKMFRAVEEGLTYKFHAAWSSVLQLLCVFFEACGRQAHPVMRKCLQSLCDLRLSPHF
PHTAALDQAVGAAVTSMGPEVVLQAVPLEIDGSEETLDFPRSWLLPVIRDHVQETRLGFFTTYFLPLANTLKS KA
MDLAQAGSTVESKIYDTLQWQMTLLPGFCTRPTDVAISFKGLARTLGMAISERPDLRVTVQCALRTLITKGCQA
EADRAEVS RFAKNFLPILFNLYGQPVAAGDTPAPRRAVLETIRTYLTITDTQLVNSLLEKASEKVLDPASSDFTR
LSVLDLVVALAPCADEAAISKLYSTIRPYLESKAHGVQKKAYRVLEEVCA SPQGP GALFVQSHLEDLKKTL LDSL
RSTSSPAKRPR LKCLLHIVRKL SAEHKEFITALIPEVILCTKEVSVGARKNAFALLVEMGHAF LRFGSNQEEALQ
CYLVLIYPGLVGAVTMVSCSILALTHLLFEFKGLMGTSTVEQLLENVCLLLASRT RDVVKSALGFIKVAVTVM DV
AHLAKHVQLVMEAIGKLSDDMR RHFRMKLRNLFTKFI RKF GFELVKRLLPEEYHRVLVNIRKAEARAKRHRALSQ
AAVEEEEEEEEEEP AQGKGDSIEEILADSEDEEDNEEEERSRGKEQRKLARQRSRAWLKEGGGDEPLNFD PKV
AQRVLATQPGPGRGRKKDHSFKVSADGRLI IREEADGNKMEEEEGAKGEDEEMADPMEDVI IRNKKHQKLKHQKE
AEEEEEELEIPPQYQAGGSGIHRPVAKKAMP GA EYKAKKAKGDVKKKGRPD PYAYIPLNRSKLNRRKMKLQGQFKG
LVKAARRGSQVGHKNRRKDRRP

WO 2004/030615

PCT/US2003/028547

3278/6881
FIGURE 3026

AAAGATTTGGGCGAGAACTTGCGCGGGAGCCGGACTGAGCGGTGCGAGCGCGCAGGCGCGGCCGACGGGGCGGGC
TGCTACTCCGGAATCTGCTAATCCCAGTCGGTGCCGCATCCCCAGCCCGCCGCCATGGCCGCCCTACAACTGGTG
CTGATCCGGCACGGCGAGAGCGCATGGAACCTGGAGAACCCTTCAGCGGCTGGTACGACGCCGACCTGAGCCCG
GCGGGCCACGAGGAGGCGAAGCGCGGGCGGGCAGGCGCTACGAGATGCTGGCTATGAGTTTGACATCTGCTTCACC
TCAGTGCAAGAAGAGAGCGATCCGGACCCCTCTGGACAGTGCTAGATGCCATTGATCAGATGTGGCTGCCAGTGGTG
AGGACTTGGCGCCTCAATGAGCGGCCTATGGGGGTCTAACC GGTTCAATAAAGCAGAACTGCTGCAAAGCAT
GGTGAGGCCCGAGGTGAAGATCTGGAGGCGCTCCTATGATGTCCCACCACCTCCGATGGAGCCCCGACCATCCTTTC
TACAGCAACATCAGTAAGGATCGCAGGTATGCAGACCTCACAGAAGATCAGCTACCCCTCTGTGAGAGTCTGAAG
GATACTATTGCCAGAGCTCTGCCCTTCTGGAATGAAGAAATAGTTCCCCAGATCAAGGAGGGGAAAACGTGTACTG
ATTGCAGCCCATGGCAACAGCCTCCGGGGCATTGTCAAGCATCTGGAGGGTCTCTCTGAAGAGGCTATCATGGAG
CTGAACCTGCCGACTGGTATTCCCATTTGTCTATGAATTGGACAAGAACTTGAAGCCTATCAAGCCCATGCAGTTT
CTGGGGGATGAAGAGACGGTGCGCAAAGCCATGGAAGCTGTGGCTGCCAGGGCAAGGCCAAGAAGTGAAGGCCG
GCGGGGAGGATACTGTCCCCAGGAGCACCCCTCCCTGCCCGTCTTGTCCCTCTGCCCCCTCCACCTGCACATGTCA
CACTGACCACATCTGTAGACATCTTGAGTTGTAGCTGCAGACGGGGACCAGTGGCTCCCATTTTCATTTTAGCCA
TTTTGTGCGCTGCACCCACTCCCTTCATACAATCTAGTCAGAATAGCAGTTCTAGAGCACAGGTTCTCAGTCTAA
GCTATGGAAAAGCTCCCTTATCCAACAGAGTTTAAAGTAGTGACTTGGGTTTTTGCGAGTGCTTTGTTTACTA
AGGACTTTGGGGAGGAACCATGCTAAGCCATGACCAGTGAGGAGAAGCAACAGAGCCTGTCTGTCCCCATGAGCG
GAGTCTGTCTCTGCTCTTCTGCAGTCAGGTCACTGCCTACTGCCTGGGGGCTCTAGTCATTCCAGTGAAGACG
AATGTAACCTGCGTGGTGATGTGACAACTGTTTCTCCCTGACCCCAGAGGATCTGGCTCTAGGTGGGATCAAT
CCTGAATTTGTTATGTGTTAATTTACTTTTATTAATAAAGTATAGTATATATAATAACAAACAATAACCTTCT
GGGGTTTCTTGTGGCGGTTGAAATAGTCCCACATGTGGTCATCAGAAAATAAGCCATTCTCATACCAATATAGG
ATCAGCTCCTTGACCTCTGAGGGGCAGGAGTGCTTCTGGTGTGTGTATTAGAATCCCTTCTGCCTTGTTTCAT
GGCAGTGAAATGCCTCTTGGTCCTGTCCAAGTGTATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACC
CTGCCACATGGGTCCAGTGTTTCATCTGAGCATAACTGTACTAAATCCTTTTTTCCATATCAGTATAATAAAGGAGT
GATGTGCAAT

WO 2004/030615

PCT/US2003/028547

3279/6881
FIGURE 3027

MAAYKLVLRHGESAWNLENRFSGWYDADLSPAGHEEAKRGGQALRDAGYEFDICFTSVQKRAIRTLWTVLDAID
QMWLPVVRTWRLNERHYGGLTGLNKAETAAXHGEAQVKIWRRSYDVPPPPMEPDHPPFYSNISKDRRYADLTEDQL
PSCESLKD TIARALPFWNEEIVPQIKEGKRVLIAAHGNSLRGIVKHLEGLSEEAIMELNLPTGIPIVYELDKNLK
PIKPMQFLGDEETVRKAMEAVAAQGKAKK

WO 2004/030615

PCT/US2003/028547

3280/6881
FIGURE 3028

GGTTGAGGATGGGCTGGCGGCGGGTCCGGGTCCGCTGCCTGGCGGTGCGGGCGGCGGGCCATGGTGGTTTGGATT
GAGCCGGGCCCCGGCCGGGGCGCCGAGTCGGAGGGGGTGGCAGTGAGCGGCGGCAGAGGCTACGGGGCTCGGTTTG
GCTGACTGGGGAGTCGGCAGGCGGCAGGAACCATGCGAGGCCAGCGGAGCCTGCTGCTGGGCCCCGGCCGCCTCT
GCCTCCGCCTCCTTCTGCTGCTGGGTACAGGCGCCGCTGTCCACCTCTACTCCGGGGTCTAGTACAGCGCTGGC
GCTACGGCAAGGTCTGCCTGCGCTCCCTGCTCTACAACCTCCTTTGGGGGCAGTGACACCGCTGTTGATGCTGCCT
TTGAGCCTGTCTACTGGCTGGTAGACAACGTGATCCGCTGGTTTGGAGTGGTGTTCGTGGTCTGGTGATCGTGC
TGACAGGCTCCATTGTAGCTATCGCTACCTGTGTGCTCCTGCTCTCATCTCCGAACCTACTCAGTGCCACGAC
TCTGCTGGCATTCTTCTATAGCCACTGGAATCTGATCCTGATTGTCTTCCACTACTACCAGGCCATCACCCTC
CGCTGGGTACCCACCCAGGGCAGGAATGATATCGCCACCGTCTCCATCTGTAAGAAGTGCATTTACCCCAAGC
CAGCCCGAACACACCCTGCAGCATCTGCAACAGGTGTGTGCTGAAGATGGATCACCCTGCCCTGGCTAAACA
ATTGTGTGGGCCACTATAACCATCGGTACTTCTTCTCTTTCTGCTTTTTCATGACTCTGGGCTGTGTCTACTGCA
GCTATGGAAGTTGGGACCTTTTCCGGGAGGCTTATGCTGCCATTGAGAAAATGAAACAGCTCGACAAGAACAAAC
TACAGGCGGTTGCCAACAGACTTATCACCAGACCCACCCACCTTCTCCTTTGAGAAAGGATGACTCACA
AGAGTCTTGTCTACCTCTGGTTCCTGTGCACTTCTGTGGCACTTGCCCTGGGTGCCCTAACTGTATGGCATGCTG
TTCTCATCAGTCGAGGTGAGACTAGCATCGAAAGGCACATCAACAAGAAGGAGAGACGTGCGCTACAGGCCAAGG
GCAGAGTATTTAGGAATCCTTACAACACGGCTGCTTGGACAACCTGGAAGGTATTCCTGGGTGTGGATACAGGAA
GGCACTGGCTTACTCGGGTGCTCTTACCTTCTAGTCACTTGCCCCATGGGAATGGAATGAGCTGGGAGCCCCCTC
CCTGGGTGACTGCTCACTCAGCCTCTGTGATGGCAGTGTGAGCTGGACTGTGTCAGCCACGACTCGAGCACTCAT
TCTGCTCCCTATGTTATTTCAAGGGCCTCCAAGGGCAGCTTTTCTCAGAATCCTTGATCAAAAAGAGCCAGTGGG
CCTGCCTTAGGGTACCATGCAGGACAATTCAAGGACCAGCCTTTTTACCACTGCAGAAGAAAGACACAATGTGGA
GAAATCTTAGGACTGACATCCCTTTACTCAGGCAAACAGAAGTTCCAACCCAGACTAGGGGTGAGGCAGCTAGC
TACCTACCTTGCCAGTGCTGACCCGGACCTCCTCCAGGATACAGCACTGGAGTTGGCCACCACCTCTTCTACTT
GCTGTCTGAAAAACACCTGACTAGTACAGCTGAGATCTTGGCTTCTCAACAGGGCAAAGATAACCAGGCCTGCTG
CTGAGGTCACTGCCACTTCTCACATGCTGCTTAAGGGAGCACAAATAAGGTATTCGATTTTTAAAGAT

WO 2004/030615

PCT/US2003/028547

3281/6881
FIGURE 3029

TCGCGTTATGGCCGCTGCCGCGGCTGTGGAGGCGGCGGCCCTATGGGTGCCCTATGGGGCCTCGTGCACGACTT
CGTCGTGGGTACAGCAAGAGGGCCCCGCTGACCAGGTGGCTGCAGATGTGAAATCTGGCAACTATACAGTGTTACA
AGTTGTGGAAGCCCTTGGGTCTCTCTAGAGAATCCAGAACCCCGAACTCGGGCACGAGGAATCCAGCTTTTGTC
ACAGGTGCTACTCCACTGTACACCTTGCTCCTGGAGAAGGAAGTGGTACACCTGATACTGTTCTATGAGAACCG
GCTGAAGGACCATCATCTTGTGATCCCATCTGTCTGCAGGGTTTGAAGGCACCTAGCCTGTGTGTGGCCCTGCC
CCCAGGGCTGGCTGTTTCTGTGCTTAAAGCCATCTTCCAGGAAGTGCATGTACAGTCCCTGCCACAGGTGGACCG
ACACACAGTCTACAATATCATCACCATTATTTATGCGAACCCGGGAAGAAGAGCTAAAGAGCCTAGGAGCTGACTT
CACCTTTGGCTTCATCCAGGTGATGGATGGGGAAGGATCCCCGTAATCTTCTGGTGGCCTTCCGCATCGTCCA
TGACCTCATCTCCAGGGACTATAGCCTGGGACCCTTTGTGGAGGAGTTGTTTGAAGTGACATCCTGTTATTTCCC
TATCGATTTTACCCCTCCACCTAATGATCCCCATGGTATCCAGAGAGAAGACCTCATCTGAGTCTTCGCGCTGT
GCTGGCTTCTACACCACGATTTGCTGAGTTTCTGCTGCCCTGTGATTGAGAAAGTGGATTCTGAGGTCTGAG
TGCCAAGTTGGATTCTCTACAGACTCTGAATGCTTGCTGTGCTGTGTATGGACAGAAGGAAGTGAAGGACTCCT
CCCCAGCCTTTGGGCTTCTATCCGCAGAGAGGTGTTCCAGACGGCAAGTGAGCGGGTGGAGGCAGAGGGCCTGGC
GGCCCTCCACTCCCTGACTGCGTGTTTGTCTCGCTCTGTGCTGAGGGCTGATGCTGAGGACCTCCTTGACTCCTT
CCTTAGCAACATTCTACAGGACTGCAGGCACCACCTGTGTGAACCGGACATGAACTGGTGTGGCCTAGTGCAAG
CTGTTGCAGGCAGCTGCAGGTGCATCTGCCCGGGCTGTGACTCTGTACCAGCAATGTACTGCCTTTACTGCTG
GAACAGTTCCACAAGCACAGTCAGAGCAGCCAGCGGGCGGACAATCCTTGAATGCTCCTGGGTTTCTTGAAGCT
GCAGCAGAAATGGAGCTATGAAGACAAAGATCAAAGGCCTCTGAATGGCTTCAAGGACCAGCTGTGCTCACTGGT
ATTATGGCTCTAACAGACCCCAGCACCCAGCTTCAGCTTGTGGCATCCGTACACTGACAGTCTTGGGTGCCCA
GCCAGATCTCCTATCTTATGAGGACTTGGAGCTGGCAGTGGGTACCTGTACAGACTGAGCTTCCTGAAGGAGGA
TTCCAGAGTTGCAGGGTGGCAGCACTGGAAGCATCAGGAACCTGGCTGCTCTTACCCTGTGGCCTTCAGCAG
CCACCTCGTACCCAAGCTCGCTGAGGAGCTGCGTGTAGGGGAGTCAAATTTGACTAACGGAGATGAGCCCACCCA
ATGCTCCCGGCATCTGTGCTGTCTGCAAGCCTTGTGAGCTGTATCAACACATCCCAGCATCGTCAAGGAGACACT
GCCTCTGCTGCTGCAGCATCTCTGGCAAGTGAACAGAGGGAATATGGTTGCACAATCCAGTGACGTTATTGCTGT
CTGTGAGAGCCTCAGACAGATGGCAGAAAAATGTGAGCAGGACCCTGAGAGTTGCTGGTATTTCCACCAGACAGC
TATACCTTGCCTGCTTGCCTTGGCTGTGCAGGCCTCTATGCCAGAGAAGGAGCCCTCAGTTCTGAGAAAAGTACT
ATTGGAGGATGAGGTGTTGGCTGCCATGGTGTCTGTCTATTGGCACTGCTACAACCCACCTGAGCCCTGAGTTAGC
TGCCAGAGTGTGACACACATTGTGCCCTCTTCTTGGATGGCAACGTGTCCTTTCTGCCTGAAAACAGCTTCCC
GAGCAGATTCCAGCCATTCCAGGATGGCTCCTCAGGGCAGAGGCGGCTGATTGCACTGCTTATGGCCTTTGCTG
CTCCCTGCCTCGAAATGTGGAAATCCCTCAGCTGAACCAACTCATGCGGGAGCTTTTGGAACTGAGCTGCTGCCA
CAGCTGCCCCCTTTTCTTCCACCGCTGCTGCCAAGTGCTTTGCAGGACTCCTCAACAAGCACCCCTGCAGGGCAGCA
GCTGGATGAATTCTACAGCTAGCTGTGGACAAAGTGGAGGCTGGCCTGGGCTCTGGGCCCTGTCGTAGTCAGGC
CTTCACTCTTCTTCTCTGGGTAACAAAGGCCCTAGTGCTCAGATACCATCCTCTCAGCTCCTGCCTTACAGCCCG
GCTCATGGGCCTCCTGAGTGACCCAGAATTAGGTCCAGCAGCAGCTGATGGCTTCTCTGCTCATGTCTGACTG
CACTGATGTGCTGACTCGTGCTGGCCATGCTGAAGTGGGATCATGTTCCGCCAGCGGTTCTTACAGATAATGT
GCCTGCTTTGGTCCAGGGCTTCCATGCTGCTCCCCAAGATGTGAAGCCAACTACTTGAAGGGTCTTTCTCATGT
ACTTAACAGGCTGCCCAAGCCTGTACTCTTGCCAGAGCTGCCACGCTTCTTCTTCTGCTGCTGGAGGCCCTGTC
CTGCCCTGACTGTGTGGTGCAGCTCTCCACCCTCAGCTGCCTTCAGCCTCTTCTACTGGAAGCACCCCAAGTCAT
GAGTCTTACGTGGACACCCTCGTCACCAAGTTTCTGAACCTCAGCTCTAGCCCTTCCATGGCTGTCCGGATCGC
CGCACTGCAGTGCATGCATGCTCTCACTCGCCTGCCACCCCTGTGCTGCTGCCGTACAAACCACAGGTGATTCC
GGCCTTAGCCAAACCCCTGGATGACAAGAAGAGACTGGTGGCAAGGAAGCAGTGTGAGCCAGAGGGGAGTGGTT
TCTGTTGGGGAGCCCTGGCAGCTTGAGCCCTCAGTCTGGCCTAGACTGTTCTGACAACTAACCTGGGATTACTA
ACTGTTGAGCCATCTTCCCCAAAGCAGGGAACCCTGGTCTCTGACTGCCTTTCCACAGACACAGCACAAATG
CTAGGCCTCTGTTGCATGGCTGTACAAAGAACATAAGAGTCCATATTTCTAGTGGATTGTGTAATAAGTGTGTG
TGAGACACTTGCGTTTGAAGAAAGATCTAGGGTCTGGGTCTCTTGCAATTTATATGTCAGAAAAGGGGCGATAG
CTGCTGAGGGGTGAGTGATATGAGTGTGGCCCTGAGGACCAGGGCTGGCAGATGTTGTCTACCTGCTGAG

WO 2004/030615

PCT/US2003/028547

3282/6881
FIGURE 3030

MAAAAAVEAAAPMGALWGLVHDFVVGQQEGPADQVAADVKSNGYTVLQVVEALGSSLENPEPRTRARGIQLLSQV
LLHCHTLLLEKEVVHLILFYENRLKDHHLVIPSVLQGLKALSLCVALPPGLAVSVLKAIFQEVHVQSLPQVDRHT
VYNIITNFMRTREEELKSLGADFTFGFIQVMDGEKDPRNLLVAFRIVHDLISRDSLGPFFVEELFEVTSCYFPID
FTPPPNDFPHGIQREDLILSLRAVLASTPRFAEFLPLLLIEKVDSEVLSAKLDSLQTLNACCAVYGQKELKDFLPS
LWASIRREVFQTASERVEAEGLAALHSLTACLSRSVLRADAEDLLDSFLSNILQDCRHHLCPEPDMKLVWPSASCC
RQLQVHLPGPVTLS PAMYCLYCWNSSTSTVRAASGGTILEMLLGFLKLQKWSYEDKDQRPLNGFKDQLCSLVFM
ALTDPSTQLQLVGIRTLTLVLGAQPDLLSYEDLELAVGHLYRLSFLKEDSQSCRVAALEASGTLAALYPVAFSSHL
VPKLAEEELRVGESNL TNGDEPTQCSRHLCCLOALS AVSTHPSIVKETLPLLLQHLWQVNRGNMVAQSSDVI AVCQ
SLRQMAEKCQQDPESCWFHQT AIPCLLALAVQASMPEKEPSVLRKVLEDEVLAAMVSVIGTATTHLSPELAAQ
SVTHIVPLFLDGNVSFLPENSFP SRFQPFQDGSSGQRR LIALMAFVCSLPRNVEIPQLNQLMRELLELSCCHSC
PFSSTAAAKCFAGLLNKHPAGQQLDEFLQLAVDKVEAGLGSGPCRSQAFTLLLWVT KALVLRYPHPLSSCLTARLM
GLLSDPELGPAADGFSLLMSDCTDVLTRAGHAEVRIMFRQRFFTDNVPALVQGFHAAPQDVKNYKGLSHVLN
RLPKPVLLPELPTLLSLLLEALSCPD CVVQLSTLSCLQPLLEAPQVMSLHVDTLVTKFLNLSSSPSMAVRIAAL
QCMHALTRLPTPVLLPYKQVIRALAKPLDDKKRLVRKEAVSARGEWFLLGSPGS

WO 2004/030615

PCT/US2003/028547

3283/6881
FIGURE 3031

CGCTGCTTAGGCTCCGCGGCCTCCAAGCTGTAGCTATGACGGCGCGCGGGACTCCGAGCCGCTTCTTGCCAGCG
TTCTCCACAACGGACTGGGTGCTATGTGCAGCAGCTGCAGCGTCTGAGCTTCAGCGTCAGCCGCGACGGCGCCT
CGTCTCGCGGCGCCAGGGAGTTCGTGGAGCGGGAGGTGATCGACTTCGCCCAGCGAATCCAGGGGTCGTAATAT
ATGTAAACTCGCGTCCGTGCTGCGTGCCAGAGTAGTGGCCGAATACCTTAACGGGGCTGTGCGCGAGGAGAGCA
TCCACTGCAAGTCGGTCGAGGAGATCTCGACGCTGGTGCAGAAGCTGGCCGACCAGTCGGGCTTGGACGTGATCC
GCATCCGCAAGCCCTTCCACACCGACAACCCTAGCATCCAGGGCCAGTGGACCCCTTCACCAACAAGCCGACCAC
GTTCCGCGGGCTACGCCCCGAGAGGTTCAAGATCCTGCCCCAGCCAGGTGCAAGCACAGTGAAGAGTTGCCCC
ACCAACTGCAGCCCCAGGCTTTGGACTGTTACTCCGGTAAAGGTGGTTCTTCCCCTTTGGGATTCCAAGCCCAGG
CAAATGGAACCCATCAATGGGCAAGTTGACAGAGGTTCTGCTTGGGATAATGAAGAGCTGCCTGTTTCTTTCCAG
TGCCTGCTTCTGGGGGCAGTGACCTTGTGAACCACTCATTTTTATGCAAGTGGCATCCCTAAAACCTGAGATGAG
GAAGACTTCAAGGGTTTTACAGGGCCCTTGTTTTTAAATCCAAATTGATAATAATGATCTCAAAACACAGTGAG
AGGTCTGAAGGCTGGCTTCTGAAGAATCCCTGATGTCTTATTGGAACAACCACTGAGCTACGGAGAGCTCTGCTG
TGATGGGCTAGGCACCTTATATCTGTGTGAATACAGATTTATAAAACAGGTTAATAAACTTATCCAAGGTCA

WO 2004/030615

PCT/US2003/028547

3284/6881
FIGURE 3032

MTARGTPSRFLASVLHNGLGRYVQQLQRLSFVSRDGASSRGAREFVEREVIDFARRNPGVVIYVNSRPCCVPRV
VAEYLNQAVREESIHCXSVEEISTLVQKLADQSGLDVIRIRKPFHTDNPSIQGQWTPSPTSRRPSAGYAPERFRI
LPQPRCKHSEELPHQLQPQALDCYSGKGGSSPLGFQAQANGTHQWAS

WO 2004/030615

PCT/US2003/028547

3285/6881
FIGURE 3033

CTGATCAGGAGGAGGTTTCAGCTGGCTGATACAATGTTTGGCCTTACCAAGGTTACAGATGACACACTCAAGCGTT
TCAGTGTGCGATATCTGCGACCTGCTCGCAGTCTTGTTCTCCCTTGGTTCTCCCTGGGGGTTTCAGGATTACGAG
GCCTGAAGCTCCTAGAGGCTAAATGCCAGGGGGATGGAGTGAGCTACGAGGAAACCCTATTCCCCGACCCAGCG
CCTACCACAATCTGTTTGGATTACCACTGATTAGTCGTCGAGATGCTGAGGTGGTACTGACGAGTCGTGAGCTTG
ACAGCCTGGCCTTGAACCAGTCCACGGGGCTGCCTACCCTTACTCTACCCCGAGGAACGACCTGCTTACCCCTG
CCTTACTCCCTTACCTGGAACAGTTCCGGCGGATTGTATTCTGGTTGGGGGATGACCTTCGGTCCCTGGGAAGCCG
CCAAGTTGTTTGCACGAAAACCTGAACCCCAAACGATGCTTCTTGGTGCGACCAGGAGACCAGCAACCCCGTCCCC
TGGAGGCCCTGAACGGAGGCTTCAATCTTTCTCGTATTCTTCGTACCGCCCTGCCTGCCTGGCACAAGTCCATCG
TATCTTTCCGGCAGCTTCGGGAGGAGGTGCTAGGAGAAGTGTGCAATGTGGAGCAAGCAGCTGGCCTCCGCTGGA
GCCGCTTTCCAGACCTCAATCGTATCTTGAAGGGACATCGAAAGGGCGAGCTGACGGTCTTCACAGGGCCAACAG
GCAGTGGAAAGACGACATTTCATCAGTGAGTATGCCCTGGATTTGTGTTCCAGGGGGTGAACACACTGTGGGGTA
GCTTCGAGATCAGCAATGTGAGACTAGCCCGGGTCATGCTGACACAGTTTGCCGAGGGGGCGGCTGGAAGATCAAC
TGGACAAATATGATCACTGGGCTGACCGCTTTGAGGACCTGCCCTCTATTTTCATGACTTTCCATGGACAGCAAA
GCATCAGGACTGTAATAGATACAATGCAACATGCAGTCTACGTCTATGACATTTGTCATGTGATCATCGACAACC
TGCAGTTTCATGATGGGTACGAGCAGCTGTCCACAGACAGGATCGCAGCTCAAGACTACATCATCGGGGTCTTTC
GGAAGTTTGCAACAGACAATAACTGCCATGTGACACTGGTCATTACCCCCGAAAGAGGATGATGACAAGGAAC
TGCAGACAGCGTCCATTTTGGCTCAGCCAAAGCAAGCCAGGAAGCAGACAATGTTCTGATCCTGCAGGACAGGA
AGCTGGTAACCGGGCCAGGGAAACGGTATCTGCAGGTGTCCAAGAACCCTTTGATGGAGATGTAGGTGCTTCC
CGCTTGAGTTCAACAAGAACTCCCTCACCTTCTCCATTCCACCAAAGAACAAGGCCCGGCTCAAGAAGATCAAGG
ATGACACTGGACCAGTGGCCAAAAGCCCTCTTCTGGCAAAAAGGGGGCTACGACACAGAACTCTGAGATTTGCT
CAGGCCAGGCCCCCACTCCCGACCAGCCAGACACCTCCAAGCGTTCAAAGTGAAGGCCGTGCAGAGCTGGTCACT
GAAATGAGCCTGATAGGATAGGCTGGAGCATAAAACCTCTGCAAGGGCTCCTCTATCCTGTGGTCCCTGAGCTGTGT
GCCCTTCTCAGTCTGAGGGGCCTAACCTAGAGCAGGTTTCATAGTGAGAAAATTCAATGTAGCAGACTACTGAG
AAACTACTGTGTTGCTCAGGCTTTGTTTGAGGTCTGTATATACAGCACTGAAAAGAGAGATAAAGTCCCTGCCT
GCATGCATTCTGGCGGAAGAGACAAGCAAGCAATGAACAAATTAGCAGAAAACCTAGTTTTAGTGAAAAATGCTG
TAAAGAAAATAGAAATGCGATAGAGTGCTGGCAGGCTAGTGATAGATAAGTGGTCTGAAAAGGTGCTCTGAGCCG
AGGGCATGTGAGCTGGGGCCTAAACAACCTAGAAGGAGAGAGCCACGTGAACATCCGGCGAAGGGGACCCAGGCAG
AGAGAAAAGGAAATCCAAGCCCTGAGGTAGGAATGAGCAGGTGAGATTCAAGGCAGTGAGGTGAGGCCGATGAA
CCTGGAGGGGAATCGGGGACTTCATGCGAACTCCAGCCTAGGCTTTCAAAGTCAAAGGGTGATACAGTGGGTAC
CAAGCTCCTCTGCTCCCCACTTTGTAGAGCCTAGCATGAGGTGGCATGTACTAGAATTGGATCCTAGGTGCTTAG
CCCTGCAATATCAGGGCCTCACTGGTGGGAGCTGCCTCGGGCTGGGTGCTTGGTCATAGAGCCATAGAAGGAAG
CTGTGACCCCGAGTGCTGCCACCTAGACACTGATGCCATTGTGTGCTGCCTCAAGACTGCTGGAGTCAGGACA
TTTTATAGAGCCTTTTCCAGTTTTACTAAAAAATTTTTCCATTGAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3286/6881
FIGURE 3034

MFGLTKVTDDTLKRFSVRYLRPARSLVFPWFSPGGSGLRGLKLEAKCQGDGVSYEETTIPRPSAYHNLFGGLPLI
SRRDAEVVLTSLRELDLALNQSTGLPTLTLPRTTCLPPALLPYLEQFRRIVFWLGDDLRSWEAAKLFARKLNPK
RCFLVRPGDQQPRPLEALNGGFNLSRI LRTALPAWHKSIVSFRQLREEVLGELSNVEQAAGLRWSRFPDLNRILK
GHRKGELTVFTGPTGSGKTTFISEYALDLC SQGVNTLWGSFEISNVRLARVMLTQFAEGRLEDQLDKYDHWADRF
EDLPLYFMTFHGQQSIRTVIDTMQHAVYVYDICHVIIDNLQFMMGHEQLSTDRIAAQDYIIGVFRKFATDNNCHV
TLVIHPRKEDDDKELQTASIFGSAKASQEADNVLI LQDRKLVTGPGKRYLQVSKNRFDGDVGVPLEFNKNSLTF
SIPPKNKARLKKIKDDTGPAKKPSSGKKGATTQNSEICSGQAPTPDQPDTSKRSK

WO 2004/030615

PCT/US2003/028547

3287/6881
FIGURE 3035A

GC GGCCGCCGCCGCCGCTGGCCCTTTGTGCTGGAACAATGACCAGCTGCCGCTGGCCCCGGGGCCCCGGCTGGG
GTTGAGGGTGACCACCGCCGCCGCCGCTCGAGCCGAACCGAGCCCCAGACACGCAGTCACAGGGCGTCGGAGG
GAGGGCTCCCAGCTGCCGCCGAGCAGCCCTACGTGCGCCCCGGCGGATTGCGGTGACGCGGGTGCTTGCGCGTG
TCCGCGCCCCGGGGCGGAGACGCCCTCGGACCCTCCCCTGCGCGGTGCCGCCACTCGCACCGGGCGGGGGCTG
GCCAGGGCCGGGGCGCCGCCGAGGCGGAGGCGGGGCTGGGCCGGGCAGCTCCGAGTGCGCGCGCGCGGGCCAGG
GCCGGGGCCGGGGCGGGGCCGAGCCGAGCCGGGGCCGGGCGGCGCGCCTGTGGAGCGCTGGGGCGGCCTGG
GGCTGAGCATGGAGCAGCGCGGCGGAGGTGAGGGGGGCCGGGTCTGGGAGGCGGCCTGGGGAGCCCCAACTTAT
GCGCGGTGGAATCCAGCCGGGGGACGGCGTTCCCCAGTCGCCCCACTTTCTGGAAGGGGGGCTGGACTCTGGA
GAATGGGTGAGGGCTCCTGGCTTCCCGCCGAGAATGGGAACCTCGTGATCGCAGACTTGACCCCGCTTGACTGG
TCCTTGAGTTTGGGTGGGAGGAGACTTTCCCAACTCTTCAGATCCGTCTCCGGCCCTGAACCACTCCAGCC
CTCTGCTCTCCTCAGCCCACTAAAAGGGGGGTGCTCTGGGCCAGAGTGATTGCTCAGGGAGTGCTGGGGAGAAT
GAGGGGTTCCTATCTCCACAGCCACAAACGCATTTCTCAAAATGGAGCCTCCACTTGCCCCCTCTTCTCTTTTCG
GGCTCCAAGAGCGGGAGCCGGCCTGGCTGGGCCTGGCTTTCCAGACTCCTGGCTCTGGCTCCCTGGATGTGTGGC
TCTCAGGGCCCGCTCTGTGGCACTTTGGACTTAAGGGCCCTCGGCTCCGTGGGGTTGGGGGGCCCTGGCTCACT
GGGTCCCGCTGGCTGTCCCTTGTGCGCCTGACCCTCGGGCCTCTCCGAGTCTTTGTCTCTTTTGGGTCCCTGTC
TTTCTCTGAGCCTGTCTCCTTCAATTTTCACTTTCTCCGTGCTCGCTGAAGTGGGGAATGCAACAGAGGT
GCCAGCCCCCTTGCCCCCTAAGAAGTCCCTTCCCCACTGTTCACTCCACACCCTGGAGTGGGGCCAGAGAGGGG
AGGGGAGGGGGTTCTCTATCTGCTCTGCTGGGGGTGGGGTGTGTGGGTGGTCTGAGCCCCAGCCCTACAGAGG
GGCCTGTGGTCACTCCCTGCTCCTGGCCTACCCCTCCCCAGCTCCCCGCAGCTCCTGCCCCAGCGTGACACCT
CTTCTGTTTCGAGTGTCTTTTGAAGTGGGTGGGAAGGAGGGCGGTGGATTAATGGAGGGCATGCGAGAAAGA
AGGGGAACAGATCAGGCAAAGGAGTTAGATAATGTCCACCTCTCCCCACACGCCGAAGAGAGAAGGAAACAGGC
TCCCCCACCAATGGGGCCCTCAAGCCACCAGGCTCCCACCACTCTCATACTGCGTGCCACGTTTACAGGCTC
CACTGCACCACTCACTTCTTAGTACACACAAACACAGGAGCTCACACATAAACTCATGAAGTTACTGACAAGT
CTGTCCAGGCACCGTCTCTCCACACACCACAAATTCATTGTTAGATCCACATTTATACTTTACAGGCTTTC
TAATGACCCCTGATCCACATACTCTTCTAAGATATACACATGTGAATTCACACATGAAGTCAATATGTATGTGAAT
GAAGTGAATATCAAACATGCATAGACTCACATGATGTTTTCACACACATTTTCATACACACGTGTTTCAATTTCA
TGCTCCTGTGCATGTAGTCACACAACAAATAACTAAATGCACACACTCCTACTCCAGTGCAATTCTCTGTCCAC
TTCTTGGCCCCGCTCTGCATGATGACTTCAGCAGATGCCAAGTCCCTGGTCAACAGCGGCTCGGGACTGGGACT
AGGGAGGGGGTTCCGGGTGGAGGCTTGACAGTGCCTCCAGGAAGGAGCAGAGCCTGGGGAGGTGGAGCCCTCTTG
CCTGGGCTCTGTGGAAGTGAGGTTTGGAGCAGCCTCCAGAGGTGAAGGCAGGGCATCTACCTTCCCTCCCTCAG
GGTTAGTTTGGGGACCTTCTGAAGCTGTAGGGTTTCAGAGAGGTGGCAGTGGGGCAGAGCCTGTGGAGGCTCCT
TCAGGCCTTCAGGCCTCACCGATTGGGTGTGCAGAGGCTAGGAGTTGTCAATGGAAGTGGTATGAGCCTGCATCC
ACCTCTGGGAGGCAGGAGACCCCAAGGACACCTGTGGACTCCCTAAGAGCCGCGGGTTTCTTATTTAGCCAGAT
CGACAGAGAGGCAGTTTAGCCGCTTCTGTCTGAGAGAACTGAGGCCAGCAGAGGGAGGCAGGGCACTGCCT
GGCCTTGGCTCTTTGTTCCCTAATTACCATCTGAGGTGCTGATTGCACCCCTGAGGTACCTCTGCCCAAAGTGC
CTGTAATGAGGCCACCTGGCTGAGAGGACCAGGGACCTGTGCTTCAAGCTGGTAGAGAAGGCCCTCCCTCACCT
GAGTCCGTGGCTCTGTGGAGGATGCAGGATTGGGCTTGGGCCTGGGTCTTTGCTGCCAGGTGGCCCTGCGGTAAT
CATCCAGGCCTCCCATGCCCTCTCAGCATCTCTGCTGAGTGAATTCCTCCTCAGCCCTGTTTACAGCAGCATTGG
GCAGTGTGGTTTGGGGCCAGGGGGAATTGAGATTCATTCCAGCACTTGAAGGGGGAGTCTTGGTGGGGATCAGG
GCTTGTTACTGATGTCAAGGAGGTGTTTGGTCAGGATCAGTGGGTGAGGAGGGGTCTCAAGGTGGAGGGACTCTG
ACACCACTGCCCTGCTTACAGGTGCGCTGCGAGGCCGCTGGCCAGGCCTGAGCCTCTGCCACCATGGCCATTGTG
CAGACTCTGCCAGTGCCACTGGAGCCTGCTCCTGAAGCTGCCACTGCCCCACAAGCTCCAGTCAATGGGTAGTGTG
AGCAGCCTTATCTCAGGCCGGCCCTGTCCCGGGGGGCCAGCTCCTCCCCGCCACCAGGCCCTCTGGGGCCACC
TTCTTCCGCCAGCAGGATGGCCTGCTACGGGGTGGCTATGAGGCACAGGAGCCGCTGTGCCAGCTGTGCCCCCT
AGGAAGGCTGTCCCTGTCAACAGCTTACCTACATCAATGAGGACTTCCGGACAGAGTACCCCCCAGCCCAAGC
AGTGATGTTGAGGATGCCCGAGAGCAGCGGGCACACAATGCCACCTCCGCGGGCCACCACCAAGCTCATCCCT
GTCTCTGAAAGCTGGAGAAGAATGAGAGAAGATCTGATCCGCCCAACAGCCTTCAAGCCAGTGCTGCCCAA
CCTCGAGGGGCTCCGTCCCTGCCTAGCTTCATGGGTCTCGGGCCACCGGGCTGTCTGGGAGCCAGGGCAGCCTG

PCT/US2003/028547

[illegible]

WO 2004/030615

PCT/US2003/028547

3289/6881
FIGURE 3036

MGSVSSLI SGRPCPGGPAPPRHHGPPGPTFFRQQDGLLRGGYEAQEPLCPAVPPRKAVPVTSFTYINEDFRTESP
PSPSSDVEDAREQRAHNAHLRGPPPKLIPVSGKLEKNMEKILIRPTAFKPVLPKPRGAPSLPSFMGPRATGLSGS
QGS LTQLFGGPASSSSSSSSSSAADKPLAFSGWASGCPSTLSDSGRNSLSSLPTYSTGGAEPTTSSPGGHLPSH
GSGRGALPGPARGVPTGPSHSDSGRSSSSKSTGSLGGRVAGGLLGSGTRASPDSSSSCGERSPPPPPPPSDEALL
HCVLEGKLRDREAELQQLRDSL DENEATMCQAYEERQRHWQREREALREDCAAQAQRAQRAQQLLQLQVFLQQE
KRQLQDDFAQLLQEREQLERRCATLEREQRELGPRLEETKWEVCQKSGEISLLKQQLKESQAEIVQKGSELVALR
VALREARATLRVSEGRARGLQEAAARELELEACSQELQRHRQAEQLREKAGQLDAEAAGLREPPVPPATADPF
LLAESDEAKVQRAAAGVGSLRAQVERLRVELQRERRRGEEQRDSFEGERLAWQAEKEQVIRYQKQLQHNYIQMY
RRNRQLEQELQQLSLELEARELADLGLAEQAPCICLEEITATEI

WO 2004/030615

PCT/US2003/028547

3290/6881
FIGURE 3037

CTGCTGGTAAGTGGTCTATTCTGCCACCCCGGGTGACTAGCTTGGCCAGTAGTCGACCCACCCGGGGACCG
ACTCTGGGGGTGGAGAGACTCTTGGGGCCGGGGTCGGGCACCTCCAGCTTTCTTCTAGCCCCGAGCTGGGATTCC
CTGGCCTGCGCCAGCTGCGTACACGGCGAGTACACCGCACCTGCCCGGGACTTCACCCGAGCTGCGAGACTCCT
CCATTCCCGGAGGGCTCCCCACACCTGCTGCGGGCGTGCCCCATCTCCCCGAGCTGCGGCGCTGAGCACCCCA
TGTCGAGAGGCTGAGACCAGGACAGCAGCCCTGACCAACGCTCCAATAGGCCGGGATCCAGCCATACTTCAATGG
ATCCCAGGGGTATCTTGAAGGCATTTCCCAAGCGGCAGAAAATTCATGCTGATGCATCATCAAAAGTACTTGCAA
AGATTCTTAGGAGGGAAGAGGGAGAAGAAGCAGAAGAGTGGCTGAGCTCCCTTCGGGCCCCATGTTGTGCGCACTG
GCATTGGACGAGCCCGGGCAGAACTCTTTGAGAAGCAGATTGTTTCAGCATGGCGGCCAGCTATGCCCTGCCCAGG
GCCAGGTGTCACTCACATTGTGGTGGATGAAGGCATGGACTATGAGCGAGCCCTCCGCCTTCTCAGACTACCCC
AGCTGCCCCCGGGTGCTCAGCTGGTGAAGTCAGCCTGGCTGAGCTTGTGCCTTCAGGAGAGGAGGCTGGTGGATG
TAGCTGGATTACAGCATCTTCATCCCCAGTAGGTACTTGGACCATCCACAGCCCAGCAAGGCAGAGCAGGATGCTT
CTATTCTCTCTGGCACCCATGAGGCCCTGCTTCAGACAGCCCTTTCTCCTCCTCCTCTCCACCAGGCCCTGTGT
CTCCTCCCCAAAAGGCAAAAGAGGCACCAACACCCAAGCCAGCCCATCTCTGATGATGAAGCCAGTGATGGGG
AAGAAACCCAGGTTAGTGCAGCTGATCTGGAAGCCCTCATCAGTGGCCACTACCCACCTCCCTTGAGGGAGATT
GTGAGCCTAGCCCAGCCCCTGCTGTCTTGATAAGTGGGTCTGTGCACAGCCCTCAAGCCAGAAGGCGACCAATC
ACAACCTCCATATCACAGAGAAGCTGGAAGTTCTGGCCAAAGCCTACAGTGTTTCAGGGAGACAAGTGAGGGGCCC
TGGGCTATGCCAAGGCCATCAATGCCCTCAAGAGCTTCCATAAGCCTGTACCTCGTACCAGGAGGCCCTGCAGTA
TCCCTGGGATTGGGAAGCGGATGGCTGAGAAAATCATAGAGATCCTGGAGAGCGGGCATTTCGGGAAGCTGGACC
ATATCAGTGAGAGCGTGCTGTCTTGGAGCTCTTCTCCAACATCTGGGGAGCTGGGACCAAGACTGCCCAGATGT
GGTACCAACAGGGCTTCCGAAGTCTGGAAGACATCCGCAGCCAGGCCCTCCCTGACAACCCAGCAGGCCATCGGCC
TGAAGCATTACAGTGAATCTCTGGAACGTATGCCCAGGGAGGAGGCTACAGAGATTGAGCAGACAGTCCAGAAAG
CAGCCCAGGCCCTTAACTCTGGGCTGCTGTGTGTGGCATGTGGTTTCATACCGACGGGGAAAGGCGACCTGTGGTG
ATGTGACGTGCTCATCACTCACCCAGATGGCCGGTCCCACCGGGGTATCTTCAGCCGCCCTCTTGACAGTCTTC
GGCAGGAAGGGTTCTCTACAGATGACTTGGTGAGCCAAGAGGAGAATGGTCAGCAACAGAAGTACTTGGGGGTGT
GCCGGCTCCCAGGGCCAGGGCGGGCGGCACCGGCGCCTGGACATCATCGTGGTGCCCTATAGCGAGTTTGCCCTGTG
CCCTGCTCTACTTCACCGGCTCTGCACACTTCAACCGCTCCATGCGAGCCCTGGCCAAAACCAAGGGCATGAGTC
TGTCAGAACATGCCCTCAGCACTGCTGTGGTCCGGAACACCCATGGCTGCAAGGTGGGGCCTGGCCGAGTGCTGC
CCACTCCCCTGAGAAGGATGTCTTCAGGCTCTTAGGCCTCCCCTACCGAGAACCTGCTGAGCGGGACTGGTGAAC
CCATGGCTGGGGGTGCTGAGGAGAGCCGAGTTGGACTGGCTACCCCTCCTGGCCACCCAGTACTCCCTCCAGCCT
CAGCTGGCTGAACCTCGCCGCTCCAACCACAGCTTCTCAGCGAGCAGGGCCCAGGGCTCTGGGCCTGAAGCAA
GAGCCAGCCCGGCTCCCAGTGTCTGCCCCGCTCCCAGTGTCTGCCCAGCCCTCTCCCAGACAGGAGCAGGCTGCC
ACCCCTTCTACCTCACCACTGCCCCCTCGAAGAATTTTGCAAATGGCCCCCTTGCCCCATTTTAAGCAGGAGCAGGT
GGCTGGTTTGAAAGCCCCAGGTATCCCCCTTCCCTGCTATGGGAAAGGCCAAGCTGCTGGGTGGGGACAGAAGCTG
CAGGGGAGAGGGAAGCAGCCGTGCTGTCAACATCATCCGGCACCCCTCTGGGGTAGGAGAACAGCCATTCCACATG
TGTTCCCTCTATCCGTCTGCTTCTGGGCAGCTGGTGGTGTGGGAATGGGGTGCCCCAGCCTTGGTGAGGACA
GTGTTGGGAGGCCCCAGGGGCCAGTAAAGTGCATTTGACATTGAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3291/6881
FIGURE 3038

MDPRGILKAFFKRQKIHADASSKVLAKIPRREEGEEAEWLSSSLRAHVVRTGIGRARAELFEKQIVQHGGQLCPA
QGPVTHIVVDEGMDYERALLRLPQLPPGAQLVKSALSLCLQERRLVDVAGFSIFIPSRYLDPQPSKAEQD
ASIPPGTHEALLQTALSPPPPPTRPVSPPOKAKEAPNTQAQPI SDDEASDGEETQVSAADLEALISGHYPTSLEG
DCEPSPAPAVLDKVVCAQPSSQKATNHNH LITEKLEVLAKAYSVQGDKWALGYAKAINALKSFHKPVTSYQEAC
SIPGIGKRMAEKIIEILESGLRLKLDHISESVPVLELFSNIWGAGTKTAQMWWYQQGFRSLEDIRSQASLTQQAI
GLKHYSDFLERMPREEATEIEQTVQKAAQAFNSGLLCVACGSYRRGKATCGDVDVLITHPDGRSHRGIFSRLLDS
LRQEGFLTDDLVSQEENGQQQKYLGVCRLLPGPGRRHRLDIIVVPYSEFACALLYFTGSAHFNRSMRALAKTKGM
SLSEHALSTAVVRNTHGCKVGPGRVLP TPTEKDVFRLLGLPYREPAERDW

WO 2004/030615

PCT/US2003/028547

3292/6881
FIGURE 3039

ATGGCGGCGGGCGGCCGGGGAGGAGGAGGAGGAGGAGGAGGAGGCGGCTCGGGAGTCGGGCTGCCCCGCCGGCCGCGGGG
CCTGCGCTCTGGCGCCTGCCGGAGGAGCTGCTGCTGCTCATCTGCTCCTACCTGGACATGCGGGCCCTCGGCCGC
CTGGCCCAGGTGTGCCGCTGGCTGCGGCGCTTACCAGCTGCGATCTGCTCTGGCGCCGGATAGCCCCGGGCCTCG
CTCAACTCCGGCTTACGCGGCTCGGCACCGACCTGATGACCAGTGTCCAGTGAAGGAACGAGTGAAGGTGTCT
CAGAACTGGAGACTGGGGCGCTGCCGAGAGGGGATTCTGCTGAAGTGGAGATGCAGTCAGATGCCCTGGATGCAG
CTAGAGGATGATTCTCTGTACATATCCCAGGCTAATTTTCATCCTGGCCTACCAGTTCCGTCCAGATGGTGCCAGC
TTGAATCGTCGGCCTCTGGGAGTCTTTGCTGGGCATGATGAGGACGTTTGCCACTTTGTGCTGGCCAACTCGCAT
ATTGTTAGTGCAGGAGGGGATGGGAAGATTGGCATTCTATAAGATTACAGCACCTTCACTGTCAAGTACTCGGCT
CATGAACAGGAGGTGAACTGTGTGGATTGCAAAGGGGGCATCATTGTGAGTGGCTCCAGGGACAGGACGGCCAAG
GTGTGGCCTTTGGCCTCAGGCCGGCTGGGGCAGTGCTTACACACCATCCAGACTGAAGACCGAGTCTGGTCCATT
GCTATCAGCCCATTACTCAGCTCTTTTGTGACAGGGACGGCTTGTTGCGGGCACTTCTCACCCCTGAGAATCTGG
GACCTCAACAGTGGGCAGCTGATGACACACTTGGGCAGTGACTTTCCCCCAGGGGCTGGGGTGCTGGATGTCATG
TATGAGTCCCCTTTACACTGCTGTCCTGTGGCTATGACACCTATGTTGCTACTGGGACCTCCGCACCAGCGTC
CGGAAATGTGTATGGAGTGGGAGGAGCCCCACGACAGCACCTGTACTGCCTGCAGACAGATGGCAACCACCTG
CTGGCCACAGGTTTCTCTACTACGGTGTGTACGGCTGTGGGACCGGCGTCAAAGGGCCTGCCTGCACGCCTTC
CCGCTGACGTCGACTCCCCTCAGCAGCCCTGTGTACTGCCTGCGTCTCACCACCAAGCATCTCTATGCTGCCCTG
TCTTACAACCTCCACGTCCTGGATTTTCAAACCCATTGA

WO 2004/030615

PCT/US2003/028547

3293/6881
FIGURE 3040

MAAAAGEEEEEEEAARESAARPAAGPALWRLPEELLLLICSYLDMRALGRLAQVCRWLRRFTSCDLLWRRIARAS
LNSGFTRLGTDLMTSVPVKERVKVSQNWRLGRCREGILLKWRCSQMPWMQLEDDSLYISQANFILAYQFRPDGAS
LNRRPLGVFAGHDEDVCHFVLANSIHVSAGGDGKIGIHKIHSTFTVKYSAHEQEVNCVDCKGGIIVSGSRDRTAK
VWPLASGRLGQCLHTIQTEDRVWSIAISPILLSFVTGTACCGHFSPLRIWDLNSGQLMTHLGSDFPFGAGVLDVM
YESPFTLLSCGYDTYVRYWDLRTSVRKCVMEWEEPHDSTLYCLQTDGNHLLATGSSYYGVVRLWDRRQRACLHAF
PLTSTPLSSPVYCLRLTTKHLAALSYNLHVLDFOQP

WO 2004/030615

PCT/US2003/028547

3294/6881
FIGURE 3041A

AGGCAGCAGCAGAGGGAGAGCTCGGGGCTTGGAGGGGAAACAGCGGAAGACCTAAGATTATCGGGAGGGCAGCAG
AGGCAGAGAACGAGGACAGGACCCTTGGCCGTCTTCTTCCAGGGAACGAGAGGTCACAGCCTCGCTCTCCGCTTA
GGCTTCTGGCGCCCCAGCTTAAAGCCGAGGCTGCGGCTGACAAAGGGCTCGCGCCGGTGCCGCCGCCCTTCTCAT
CCGGGCATTTCGGGTCCCTGCGGAGAGGGAGGGGGAAGGGCAGAGGGGGAGGGGAAGGAGCCGGAGGGGCGCACAC
TTGGAGCTGAAGCCCTCTCCAGGGCTCCGGGCCGGTGCCCCAACGGACAGAGGTCGAGGAGGACCCGCAGAGGTG
GCAGCGGCCGGGGCAGGAGGATGGTGAGAAGGAGAGTCAAGCGACGTTGGAGGAGCGGGAGAGCGAGCTCAGC
TCCAACCCTGCCGCTCTGCGGGGGCATCGCTGGAGCCGCCGGCAGCTCCGGCACCCGGAGAAGACAACCCCGCC
GGGGCTGGGGGAGCGCGGTGGCCGGGGCTGCAGGAGGGGCTCGGCGGTTCTCTGCGGTGTGGTGAAGGATTT
TATGGAAGACCTTGGGTTATGGAACAGAGAAAAGAACTCTTTAGAAGGCTCCAGAAATGGGAATTAATACATAC
TTGTATGCCCAAAAGATGACTACAAACATAGGATGTTTTGGCGAGAGATGTATTCACTGGAGGAAGCTGAGCAA
CTTATGACTCTCATCTCTGCTGCACGAGAATATGAGATAGAGTTTCATCTATGCGATCTCACCTGGATTGGATATC
ACTTTTTCTAACCCCAAGGAAGTATCCACATTGAAACGTAAATTGGACCAGGTTTTCTCAGTTTTGGGTGCAGATCA
TTTGCTTTGCTTTTTGATGATATAGACCATAATATGTGTGCAGCAGACAAAGAGGTATTCACTTTTGTCTCAT
GCCCAAGTCTCCATCACAAATGAAATCTATCAGTACCTAGGAGAGCCAGAACTTTCTCTTCTGTCCCACAGAA
TACTGTGGCAGCTTTCTGTTATCCAAATGTGTCTCAGTCTCCATATTTAAGGACTGTGGGTGAAAAGCTTCTACCT
GGAATTGAAGTGCTTTGGACAGGTCCCAAAGTTGTTTCTAAAGAAATTCCAGTAGAGTCCATCGAAGAGGTTTTCT
AAGATTATTAAGAGAGCTCCAGTAATCTGGGATAACATTTCATGCTAATGATTATGATCAGAAGAGACTGTTTTCTG
GGCCCGTACAAAGGAAGATCCACAGAACTCATCCCACGGTTAAAGAGGAGTCTCACTAATCCAAATTGTGAATTT
GAAGCCAACCTACGTTGCTATCCACACCCTTGCCACCTGGTACAAATCAAACATGAATGGAGTGAGAAAAGATGTA
GTGATGACTGACAGTGAAGATAGTACTGTGTCCATCCAGATAAAATTAGAAAATGAAGGCAGTGATGAAGATATT
GAACTGATGTACTCTATAGTCCACAGATGGCTCTAAAGCTAGCATTAAACAGAATGGTTGCAAGAGTTTTGGTGTG
CCTCATCAATACAGCAGTAGGCAAGTTGCACACAGTGGAGCTAAAGCAAGTGTAGTTGATGGGACTCCTTTAGTT
GCAGCACCTCTTTAAATGCCACAACCGTAGTAACAACAGTTTTATCAGGAGCCATTATGAGCCAGGGAGCAGCC
TTGAGTGGTGAGCCTACTACTCTGACCAAGGAAGAAGAAAAGAAAAGCCTGATGAAGAACCCATGGACATGGTG
GTGGAAGAAACAAGAAAGAAACGGACCACAAGAATGACAATCAAATACTGAGTGAAATTGTTGAAGCGAAAATGGCA
GAGGAATTGAAACCAATGGACACTGATAAAGAGAGCATAGCTGAATCAAATCCCCAGAGATGTCCATGCAAGAA
GATTGTATTAGTGACATTGCCCCCATGCAAACTGATGAACAGACAAACAAGGAGCAGTTTTGTGCCAGGTCCAAAT
GAAAAGCCTTTGTACACTGCGGAACCAAGTGACCCTGGAGGATTTGCAGTTACTTGTCTGATCTATTCTACCTTCCT
TACGAGCATGGACCCAAAGGAGCACAGATGTTACGGGAATTTCAATGGCTTCGAGCAAATAGTAGTGTGTGTCAGT
GTCAATTGCAAGGAAAAGACTCTGAAAAAATTGAAGAATGGCGGTCACGAGCAGCCAAGTTTTGAAGAGATGTGT
GGACTAGTGATGGGAATGTTCACTCGGCTCTCCAATTGTGCCAACAGGACAATTCTTTATGACATGTACTCCTAT
GTTTGGGATATCAAGAGTATAATGTCTATGGTGAAGTCTTTGTACAGTGGTTAGGGTGTCTGATGATCTTTCA
GCACAATTCTTAATTGGAGACCAAGAACCCTGGGCCCTTTAGAGGTGGTCTAGCAGGAGAGTTCCAGCGTTTTGCTG
CCAATTGATGGGGCAAATGATCTCTTTTTTCAGCCACCTCCACTGACTCCTACCTCCAAAGTTTATACCTATCAGA
CCTTATTTTCCTAAGGATGAGGCATCCGTGTACAAGATTGCAGAGAAATGTATGACGATGGAGTGGGTTTACCC
TTTCAAAGTCAGCCTGATCTTATTGGAGACAAGTTAGTAGGAGGGCTGCTTTCCCTCAGCCTGGATTACTGCTTT
GTCCTAGAAGATGAAGATGGCATATGTGGTTATGCCTTGGGCACTGTAGATGTGACCCCTTTATTAATAAATGT
AAAATTTCTGGATCCCTTTCATGCAGGAGAAGTATACCAAGCCAAATGGTGACAAGGAACCTCTCTGAGGCTGAG
AAAATAATGTTGAGTTTCCATGAAGAACAGGAAGTACTGCCAGAACTTTCTTGTCTAATTTCCCTTCTCTGATA
AAGATGGACATTACAAAAAAGTAACTGACCCAAGTGTGGCCAAAAGCATGATGGCTTGCCCTCTGTCTTCACTG
AAGGCTAATGGCTCCCGGGGAGCTTTCTGTGAAGTGAGACCAGATGATAAAGAATTCTGGAATTTTACAGCAAG
TTAGGATGTTTTGAAATTGCAAAAATGGAAGGATTCCAAAGGATGTGGTTATACTTGGTGGAGCCTGTGACAT
TTGTTGACACTGTGAAGTGTCCAAAAGTCTCTTAAGTCTGAACTGACCTTGTGAATGGTAGTTGAGGTCTTCATACAGTTC
AGCCTCTAGAATGGTAACAAATCAGCCAATTGGATTTCGAAACAAAGAAGACTATGTAAAATCACCACATCACACT
TTGAGACTACTCTAGTTGGTGAAGAATATAGTATTGCAGCAAACTCTGTATGAAAGAGAGATGTGGGCTTCCTTT
TTGAGTCTTGTGTTAGGTGCTGAGACCTTTTACATGGGCTTATACAGGGAGAGAGTCTTCAATAAATGTAGTCAG
CACTATTTTCTGCATCCAGTGTGGTTGCGTTTTCTCACCTGAGAGTAATCAAGATAACATCTGTCTCTCTTGG
TTTATTGAGTGAAATGCCTCTCAGTCTTAGGGGACATGGCAGAGATGAAAGAAAGAAAGAGTGGGTTTCAGAAGT

WO 2004/030615

PCT/US2003/028547

3295/6881
FIGURE 3041B

GTCAGGGTGGAGTGATTCCAAGTGGGATGGTTGTGGCATTAGTTTAAGCTGAATAAATAATTTCAATTTGGGGCA
GTTATTCTGCTTTTTGTAAAGCCGTGGCCAATTGTCTCCTGTAATGACTGTTGGTTCAGGCATGTTGTACTTTGT
AGGGACAAATGTGCATTTGTTTGTGGCAAAGCCTACAATTGACAACTTGTAATTTCTTTGTATATAAACTAG
CTGTAACCTGACTATCCTTTGTGTTTACTGTTTTTGTAAATTTTTTCTCTATAAAATGAAAGGGTGTGGTTCA
GAATGGCACTTTGAATAATGTAAACAGTGAAAAGTGGATTTTCTTTACTTTTGTCTTTGGGTTTGGGGTTGTTT
TTGTTCTTTTTGAAGTTTTATTATTTTTAAAGTGCCTCCACCTAGGCGTAGGCCATGACCATTGTTGGGTACGAG
AGCCTAATTTTGTAGGACTTAATCTGTTGAAAAGTGCAGTTACTTCTGGAAATTAACCTCAATATTAGGTCAGCA
TGTGAAATGTTGGATTTGACATGTCAGGTAGGGTTTCAAGGACTGATTGGTCCCATTTGCCCTCAGGTCAGTTGTT
TAATCTCAAGACCTGTTACTACTGATTTTATTAAATCAGAGTCTTTAATTCCTGTCATGTTTGTATCTAATTTCTG
AATGAATGAGCACACTTTAACCAGTTATTTACAGTTACCTTTTTCTTTAACCGGATTGTGAAAGCTTCATGTAT
TTTAATTTAGATTCTGTGTTTTTAAGGGTTCTGAGCATGAAGCTGGCAGATAGTCGGCAGGACTCATTTTTTCAT
CATGGCTGGCTGATTTCTCCATAGATTGATAACAGTATTTTGTTATCTTGCTTCTCTGTAGTTTTGCATCAGCTG
TTTAACTTTGAGCTGAGTGAGGGGAGAGGGGTAAAGAGAAAGAACTTAAGTTTTCTTTCACAGAACTCCACCAT
TGTGGGCTTTGAGAGAGCCCTAAAGCATTGTACCTAGTGGTACCTAGTGACTTCCAACCAAAGCCTTTGAGTATG
CACTAAATAGGTGAGAAGAAAGGAGAGAAGTTTTTAGGTTAGAAACCTTTAACCGATAGAAGGATATGGTATGT
TGTAAGCTGGAACCAAGTTTGCATTTTTGAGGGCTTGAGATGAAGGAAGACTCTTACCAGATAGTAAGACAGC
TGAGTTTTCTCAGTTTTCTCGTCTTAACACTAGTGGACAATTCTAGCATTTTGTGTTGGAGGATTCAGAGTTAA
CCTCATGGAATTCAGGATTTTTTAGCAAGTTTGCTTTTGGTTTTATCTTGCTTTTAGTAATCATGTTGGCTGGT
CTGGTCACAGGTGACTGTGAAACAGATGCCCTGGTCTTGCTTTTCATCACTCTAGGATCATGAAGTGCTATGCTAT
TTCTTGGTTATGAATATTAAGGTTGGAATTACATTTTTATTGATTGTTTGGATCAGAGCTCAGTTCCTGTAGAAA
ACGAAGTGTAAAAGACCATGCAAGAGGCAAAATAAACTTGAAGTG

WO 2004/030615

PCT/US2003/028547

3296/6881
FIGURE 3042A

GCCAGCGATCAGAGCAGCGCTGGGTGTTTCAGGGGCCAAGATGGCGGCGCGCCGGGGACGGAGAGACGGAGTCGCG
CCGCCCCCGAGTGGGGGGCCCCGGTCCGGACCCTGGCGGGGGAGCCCGCGCAGTGGTTGGCGAAGTCGAAGCCAA
GCGCCGTATGGGACTTTGGGCGCTGTGAGCGGCGGCGAGCAGGTGCTGCTGCATGAGGAGGCGGGTGATTCTGGC
TTTGTCACTCTCTCTCGGCAGGGCCCATCTCTGAGGGACAAGGACCTGGAAATGGAGGAGCTAATGCTGCAGGAT
GAGACACTGCTGGGGACCATGCAGAGCTACATGGATGCCTCCCTTATCTCCCTCATTGAGGATTTTGGGAGCCTT
GGAGAGAGCAGGTTATCTCTGGAGGACCACAATGAAGTGTGCTGCTCACGGCTCTGACGGAGATCTTGGACAAT
GCAGATTCTGAGAACCTTTCTCCATTTGACAGCATTCTGATTGCGAGCTGCTTGTGTACCCCGGGAGGGCTCC
TCTCTGCACAAGCTGCTTACTCTCTCTCGGACACCCCCAGAAGCTGACCTCATCACCCAGTTGACCCACTGGGG
CCCAGTACGGGCAGCAGTAGAGGGAGTGGGGTTGAATGTCTCTTCCAGATCCCTCTTGGGACTTCTCCCCACCC
TCTTTCTTAGAGACCTCTTCCCCAAGCTTCTAGCTGGAGACCCCAAGATCAAGACCACGCTGGGGCCAAATCC
CCACCTCCCCAGCAGCGCAGTGATGGAGAAGAAGAGGAGGAGGTGGCCAGCTTCAGTGGCCAGATTCTTGCCGGG
GAGCTTGACAACCTGTGTGAGCAGTATCCCGGACTTCCCCATGCATTTGGCCTGCCCTGAGGAGGAAGATAAAGCA
ACAGCAGCAGAGATGGCAGTGCCAGCAGCTGGTGATGAGAGCATCTCCTCCCTGAGTGAGCTGGTGCGGGCCATG
CACCCATACTGCCTGCCCAACCTCACCCACCTGGCATCACTTGAGGATGAGCTTCAGGAGCAGCCAGATGATTTG
ACACTGCCTGAGGGCTGCGTAGTGCTGGAGATTGTGGGGCAGGCAGCCACAGCTGGCGATGACCTGGAGATCCCA
GTTGTGGTGCGACAGGTCTCTCCTGGACCCCGGCTGTGCTCCTGGATGACTCGCTAGAGACTAGTTCTGCCTTG
CAGCTGCTTATGCCTACACTGGAGTCAGAGACAGAGGCTGCTGTGCCCAAGGTAACCCCTCTGCTCTGAGAAAGAG
GGGTTGTCAATTGAAGCTCAGAGGAGAAGCTGGACTCAGCCTGCTTATTGAAGCCCAGGGAGGTGCTGGAGCCGGTG
GTGCCCAAGGAGCCTCAGAACCCACCTGCCAATGCAGCACCAGGTTCCAGAGAGCTCGAAAGGGCAGGAAGAAG
AAGAGCAAGGAGCAGCCAGCAGCCTGTGTGGAAGGCTATGCCAGGAGGCTGAGGTCACTTCTCGCGGGCAGTCT
ACTGTAGGTACAGAAGTGACCTCTCAGGTAGACAACCTTGAGAAACAGCCTCAGGAAGAAGCTTCAAAAAGAGTCT
GGGCTCTCCAGGGTAAGGGGAAGCCCCGGGCTTGGGCTCGGGCTGGGCAGCTGCCTTGGAGAATTCTAGCCCT
AAGAAGCTTGAGAGAAAGTGCTGGACAAAGTAGTCTGCTAAAGAAGGCCCTCTAGACCTCTACCCAAAGCTGGCT
GACACTATCCAAACCAATCCTATACCAACCCATCTCTCATTGGTGCAGTCTGCCCAAGCCAGCCCCATGCCAGTT
GACTCTGTTGAAGCTGATCCCACTGCAGTTGGCCCTGTTCTAGCTGGCCCTGTACCTGTTGACCCCTGGGTTGGTT
GACCTTGCTTCAACCAGCTCAGAACTGGTTGAGCCTCTCCCGGCTGAGCCAGTGCTGATCAACCAGTCTCTGGCT
GACTCAGCAGCAGTTGACCCTGCAGTGTTCCCATCTCAGATAACTTGCCACCAGTTGATGCTGTCCCGTCTGGC
CCAGCACCAGTTGATCTAGCACTGGTTGACCCTGTTTCTAATGACCTGACTCCAGTTGACCCAGTGCTAGTTAAG
TCCAGACCAACTGATCCAGACGTGGTGAGTGTCATCAGCCCTGGGGGGTTGAGCAGCCAGCTCCTCGTGGAG
TCAGAGTCTTGGACCCACCAAGACCATCATCCCTGAAGTCAAAGAGGTTGTGGATTCTCTGAAAATTGAAAGT
GGTACCAGTGCTACAACCCATGAAGCCAGACCTCGGCCCTCAGCTTATCTGAGTACCGGCGACGAAGGCAGCAA
CGCCAAGCAGAAACAGAAGAGAGAAGTCCACAGCCCCCACTGGGAAGTGGCCTAGCCTTCCAGAGACTCCCA
GGGCTGGCAGACATCCCTTGTCTTGTATCCACAGCCCCAGCCAAGAAGACAGCTCTGCAGAGAAGCCCTGAA
ACACCCCTTGAGATTTGCCTTGTGCTGTAGGTCCAGCCCTGCTTCTCCTAGTCTGAGCCACCTGTAAGCAAA
CCTGTGGCCTCATCTCCCACTGAGCAGGTGCCATCCAGGAGATGCCACTGTTGGCGAGACCTTCCCCTCCTGTG
CAGTCTGTGTCCCCTGCTGTGCCCACACCTCCCTCGATGTCTGCTGCCCTGCCCTTTCCTGCAGGTGGGCTTGGC
ATGCCCCCAGTCTGCCCCACCTCCCTTGACGCTCCTAGTCTTCCATTGTCTATGGGGCCAGTACTACCTGAT
CCGTTTACTCACTATGCCCCCTTGCCATCCTGGCCTTGTTATCCTCATGTGTCCCCTTCTGGCTATCCTTGCCCTG
CCCCCCCCACCAACGGTGCCCCCTAGTGTCTGGTACTCCTGGTGCCCTATGCCGTGCCCTCCCACTTGCAGTGTGCCT
TGGGCACCCCTCCTGCCCCAGTCTCACCTTACAGTTCCACATGTACCTATGGGCCCTTGGGATGGGGCCCAGGG
CCTCAACATAGTCTCCATTCTGGTCTACTGTTCCCCACCTCCTTGGCTCCAGCCTCCATTGGGAGAGCTGTTCCC
CAACCTAAAATGGAGTCTAGGGGCACCTCAGCTGGCCCTCCTGAAAATGTACTTCCCTTGTGATGGCTCCTCCC
CTCAGTCTTGGGCTACCTGGCCATGGAGCTCCTCAGACAGAGCCTACCAAGGTGGAGGTCAAGCCAGTGCCCTGCA
TCTCCCCATCCGAAACACAAGGTGTCTGCCCTGGTGCAAAGTCCCCAGATGAAGGCTCTAGCATGTGTGTCTGCT
GAAGGTGTGACTGTTGAGGAGCCTGCATCAGAGAGGCTAAAGCCTGAGACCCAAGAGACCAGGCCAGGGAGAAG
CCCCCCTTGCCCTGCTACCAAGGCTGTTCCACACCAAGGCAGAGCACTGTCCCAAGCTGCCTGCTGTCCACCCA
GCCCCGTCTAAGGAAGCTGTCTTCTGCTACCCACGTAAGGTTCTGAAGATGTGGTACAGGCTTTCATC
AGTGAGATTGGAATTGAGGCATCGGACCTGTCCAGTCTGCTGGAGCAGTTTGAGAAATCAGAAGCCAAAAAGGAG

WO 2004/030615

PCT/US2003/028547

3297/6881
FIGURE 3042B

TGTCCTCCTCCGGCTCCTGCTGACAGCTTGGCTGTAGGAACTCAGGCGGCGTTGACATTCCCCAGGAGAAGAGG
CCCCTAGACCGGTTACAAGCCCCAGAAGCTGGCCAACGTGGCAGGGGCTCACCCCTCCAGCTACCCCTCCCCACCAG
TTATGGAAGCCCCTGGCTGCTGTCTCACTGCTGGCCAAAGCCAAATCTCCTAAGTCCACCGCCCAGGAGGGAACC
CTGAAGCCTGAAGGAGTTACGGAGGCCAAACATCCAGCTGCAGTTCGCCTCCAAGAAGGGGTCCATGGCCCTAGT
CGAGTCCATGTGGGCTCTGGGGACCATGACTATTGTGTCCGGAGCAGGACCCCCCAAAAAAGATGCCTGCCCTA
GTCATTCCAGAGGTGGGCTCCCGATGGAATGTCAAGCGCCATCAGGACATCACCATCAAACCTGTCTTGTCTTG
GGCCAGCTGCCCTCCGCCCCATGCATAGCTGCCTCCCGGGAGCCGCTTGATCACAGGACTAGCAGTGAGCAG
GCAGATCCCTCAGCACCTGCCTTGCCCCATCCAGCTTGCTGTCCCTGAGGCCTCACCTGCGGAATGACATG
AACACTAGGACTCCCCCTGAACCCTCAGCCAAGCAGCGGTCAATGCGCTGTTACCGAAAAGCCTGCAGGTCAGCC
AGCCCTCAAGCCAGGGCTGGCAGGGCCGCCGAGGCCGCAACAGCCGTTCTGTGAGCTCTGGGTCCAACCGGACT
AGCGAAGCATCTTCCTCATCCTCATCATCGTCTTCCTCATCCCGATCTCGGTCCAGGTCCCTCTCCCCCCCCACAC
AAGAGGTGGCGAAGGTCCAGCTGTAGTTCTCTGGACGTTCTCGAAGATGCTCTTCCTCTTCTTCGTATCATCT
TCCTCTTCGTCTTCCTCATCCTCATCATCCAGTTCTCGAAGCCGCTCACGATCCCCATCCCCCGCCGAGAGT
GACAGGAGGCGGCGGTACAGCTCTTATCGTTACATGACCATTACCAAAGGCAAAGAGTGCTACAAAAGGAGCGT
GCAATAGAAGAAAGAAGGGTGGTCTTCATTGGAAAGATACCTGGCCGCATGACTCGATCAGAGCTGAAACAGAGG
TTCTCCGTTTTTGGAGAGATTGAGGAGTGCACCATCCACTTCCGTGTCCAAGGGGACAACCTACGGCTTCGTCACT
TATCGCTATGCTGAGGAGGCATTTGCAGCCATTGAGAGTGGCCACAAGCTGCGGCAGGCAGATGAGCAGCCCTTT
GATCTCTGCTTTGGGGGCCGAAGGCAGTTCTGCAAGAGGAGCTATTCTGATCTTGACTCCAACCGGGAAGACTTT
GACCCAGCACCTGTAAAGAGCAAATTTGATTCTCTTGACTTTGACACATTGTTGAAACAGGCCCCAGAAGAACCTC
AGGAGGTAACCTTGGGCCCTTCCCTGCTATCCTTTTTCTCCTTTGGAGGTGCCCAACCTCCTCCACCCCCCTTCCC
CTACTCTAGGGGAGAGAGCTGCTAGTGAGATGACTGTTTTATAAAGAAATGGAAAAAAGTGAAATAAAAAATATG
TTGAATCAGATTTTTTAAAAGGGGTATTTGTTTTTTTATAACAGGTATTGAAACAAGTTAACTTGCAATTCCTATG
TAAGATAGGAGGGGCTGAGGGGATCCCCAGTGTGGAACATAAGTCACTATGCAGACTAATAAACATCACTAG
AGAGAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3298/6881
FIGURE 3043

MAARRGRRDGVAPPPSGGPGPDPGGGARGSGWRSRSQAPYGTLGAVSGGEQVLLHHEAGDSGFVSLSRQGP SLRD
KDLEMEELMLQDETL LGTMQSYMDASLISLIEDFGSLGESRSLSEDHNEVSLLTALTEILDNADSENLSPFDSIP
DSELLVSPREGSSLHKLLTLSTRTPPERDLITPVDPLGPGSTGSSRGSGVEMSLPDPSWDFSPPSFLETSSPKLPSW
RPPRSRPRWGQSPPPQQRSDGEEEEEEVASFSGQILAGELDNCVSSIPDFPMHLACPEEEDKATAAEMAVPAAGDE
SISSLSSELVRAMHPYCLPNLTHLASLEDELQEQPDDLTLPEGCVVLEIVGQAATAGDDLEIPVVVRQVSPGPRPV
LLDDSLLETSSALQLLMPTLESETEAAVPKVTLCSEKEGLSLNSEEKLD SACLLKPREVVEPVVPKEPQNPPANAA
PGSQARARKGRKKKSKEQPAACVEGYARRLRSSSRGQSTVGTEVTSQVDNLQKQPQEELQKESGPLQGKGKPRAWA
RAWAAALENSSPKNLSERSAGQSSPAKEGPLDLYPKLADTIQTNP IPTHLSLVDSAQASMPVDSVEADPTAVGPV
LAGPVVPDPLVDLASTSSELVEPLPAEPVLINPVLADSAAVDPAVVPISDNLPVDAVPSGPAPVDLALVDPVP
NDLTPVDPVLVKS RPTDPRRGAVSSALGGSAPQLLVESESLDPPKTI IPEVKEVVD SLKIESGTSATTHEARPRP
LSLSEYRRRRRQORQAETEERSQPPTGKWPSLPETPTGLADIPCLVIPPAPAKKTALQ RSPETPLEICLVPGPS
PASPSPEPPVSKPVASSPTEQVPSQEMPLLARPSPPVQSVSPAVPTPPSMSAALPFPAGGLGMPPSLPPPPLOPP
SLPLSMGPFVLPDPFFTHYAPLP SWPCYPHVSPSGYPCLPPPPTVPLVSGTPGAYAVPPTCSVPWAPPPAPVSPYSS
TCTYGPLGWGPGPQHAPFWSTVPPPLPPASIGRAVPQPKMESRGTPAGPPENVLP LSMAPPLSLGLPGHGAPQT
EPTKVEVKPVPA SPHPKHKVSALVQSPQMKALACVSAEGVTVEEPASERLKPETQETRPREKPLPATKAVPTPR
QSTVPKLPVHPARLRKLSFLPTPRTQGS EDVVQAFISEIGIEASDLSSLLEQFEKSEAKKECPPAPADSLAVG
NSGGVDIPQEKRLDRLQAPELANVAGLTTPPATPPHQLWKPLAAVSL LAKAKSPKSTAQEGTLKPEGVTEAKHPA
AVRLQEGVHGPPSRVHVSGDHDYCVRSRTPPKMPALV IPEVGSRWNVKRHQDITIKPVL SLGPAAPPPPCIAAS
REPLDHRTSSEQADPSAPCLAPSSLLSPEASPCRNDMNTRTPPEPSAKQ RSMRCYRKACRSASPSSQGWQRRGR
NSRSVSSGSNRTSEASSSSSSSSSSSSRSRSRSLSPPHKRWRSSC SSSGRSRRCS SSSSSSSSSSSSSSSSSSSSR
SRSRSPSPRRSRDRRRYSSYRSHDHYQRQ RVLQKERAIEERRVVF IGKIPGRMTRSELKQRFSVFGEIECTIH
FRVQGDNYGFVTYRYAEEFAAIESGHKLRQADEQPF DLFCGGRRQFCKRSYSDLDSNREDFDPAPVKS KFD SLD
FDTLLKQAQKNLRR

WO 2004/030615

PCT/US2003/028547

3299/6881
FIGURE 3044A

GTCGTGCTGCGTCGACAACGGTAGTGACGCGTATTGCCTGGAGGATGGCGGACGCCGGCATTGCGCCGCTGGTTTC
CCAGCGACCTGTATCCCCTCGTGCTCGGCTTCCTGCGCGATAACCAACTCTCAGAGGTGGCCAATAAGTTTCGCCA
AAGCGACAGGAGCTACACAGCAGGATGCCAATGCCTCTTCCCTCTTAGACATCTATAGCTTCTGGCTCAAGTCTG
CCAAGGTCCCAGAGCGAAAGTTACAGGCAAATGGACCAGTGGCTAAGAAAAGCTAAGAAGAAGGCCTCATCCAGTG
ACAGTGAGGACAGCAGCGAGGAGGAGGAGGAAGTTCAAGGGCCTCCAGCAAAGAAGGCTGCTGTACCTGCCAAGC
GAGTCGGTCTGCCTCCTGGGAAGGCTGCAGCCAAAGCATCAGAGAGTAGCAGCAGTGAAGAGTCCAGTGATGATG
ATGATGAGGAGGACCAAAGAACAGCCTGTCCAGAAGGGAGTTAAGCCCCAAGCCAAGGCAGCCAAAGCTCCTC
CTAAGAAGGCCAAGAGCTCTGATTCTGATTCTGACTCAAGCTCCGAGGATGAGCCACCAAAGAACCAGAAGCCAA
AGATAACACCTGTGACAGTTAAAGCTCAGACTAAAGCCCCCTCCCAAACCAGCTCGAGCAGCACCTAAAATAGCCA
ATGGTAAAGCAGCCAGTAGCAGCAGTAGCAGCAGCAGCAGCAGTAGCAGTGATGACTCAGAGGAGGAGAAGGCAG
CAGCCACCCCCAAGAAGGTCTGGACCATAACTTCTGTCAAGGCAGAGACTGTACCTAAAAAGCAAGTTGTGGCCA
AGGCCCCAGTGAAAGCAGCTACCACCCCTACCCGGAAGAGTTCTAGCAGTGAGGATTCTCCAGTGACGAGGAAG
AGGAGCAAAAAAACCCTATGAAAAATAAACAGGTCCCTACAGTTCAGTCCCCCGCCTTCTGCTCCCCACCAA
AGAAGTCTCTGGGAACCCAGCCTCCCAAGAAGGCTGTGGAGAAGCAGCAGCCTGTGGAAAGCAGTGAAGACAGCA
GTGATGAGTCTGATTCAAGTTCTGAAGAAGAGAAGAAACCCCCAACTAAGGCAGTAGTCTCTAAAGCAACCACTA
AACCACCTCCAGCAAAGAAAGCAGCAGAGAGCTCTTCAGACAGCTCAGACTCTGACAGCTCTGAGGATGATGAAG
CTCCTTCTAAGCCAGCTGGTACCACCAAGAATTCTTCAAATAAGCCAGCTGTACCACCAAGTCACCTGCAGTGA
AGCCAGCTGCAGCCCCAAGCAACCTGTGGGCGGTGGCCAGAAGCTTCTGACGAGAAAGGCTGACAGCAGCTCCA
GTGAGGAAGAGAGCAGCTCCAGTGAGGAGGAGAAGACAAAGAAGATGGTGGCCACCCTAAGCCCAAGGCGACTG
CCAAAGCAGCTCTATCTCTGCCTGCCAAGCAGGCTCCTCAGGGTAGTAGGGACAGCAGCTCTGATTACAGACAGCT
CCAGCAGTGAGGAGGAGGAAGAGAAGACATCTAAGTCTGCAGTTAAGAAGAAGCCACAGAAGGTAGCAGGAGGTG
CAGCCCCCTTCCAAGCCAGCCTCTGCAAAGAAAGGAAAGGCTGAGAGCAGCAACAGTTCTTCTTCTGATGACTCCA
GTGAGGAAGAGGAAGAGAAGCTCAAGGGCAAGGCTCTCCAAGACCACAAGCCCCAAGGCCAATGGCACCTCTG
CACTGACTGCCAGAATGGAAAAGCAGCTAAGAACAGTGAGGAGGAGGAAGAAGAAAAGAAAAGGCGGCAGTGG
TAGTTTCCAAATCAGGTTTCAATTAAGAAGCGGAAGCAGAATGAGGCTGCCAAGGAGGCAGAGACTCCTCAGGCCA
AGAAGATAAAGCTTCAGACCCCTAACACATTTCCAAAAAGGAAGAAAGGAGAAAAAAGGGCATCATCCCCATTCC
GAAGGCTCAGGGAGGAGGAAAATGAGGTGGATTACAGAGTTGCGGACAACCTCTTTGATGCCAAGCGAGGTGCAG
CCGGAGACTGGGGAGAGCGAGCCAATCAGGTTTTGAAGTTACCAAAGGCAAGTCCTTTTCGGCATGAGAAAACCA
AGAAGAAGCGGGGAGCTACCGGGGAGGCTCAATCTCTGTCCAGGTCAATTCTATTAAGTTTGACAGCGAGTGAC
CTGAGGCCATCTTCGGTGAAGCAAGGGTGATGATCGGAGACTACTTACTTTCTCCAGTGAGCCTGGGAACCCCTCA
GGTCTCTAGGTGAGGGTCTTGATGAGGACAGAAGTTTAGAGTAGGTCTTAAGACTTTACAGTGTAACATCCTCTC
TGGTCCTTTTCTGTGTTCTTAGTTTTGTACAGACTTGTTTTTGAGTGTGAGTAGCAGGGACAAAATAAGGGAAT
GTTATTTTTTAAGAAAATTCATTTTCATTGTTGTCTCCTTCTTTTTCTGTGAAAGTCTCATACTGAGAAATTTG
TATATTTTATATTAATCACTTACTATTGATTTTTGTTGTGATTTTTCAAAGGTGGATTCCCACAGATAAAATCTT
GGCTATTGCCAAAACATAGTAAAGGGTCACGTGTGACTTTTTATAATAGGAAGAAAATCTGCCTTTGTGAGTG
CACATGTCCACATTTTATCCCTCCTTCCCTCAAAACCCTAGAGAGGGGCATTAAAGAATTGTTGATGTATATGCA
ATGCTGTAAAGCATGCACTATGTATTTTATCCTCATTTATTGGGTCTGGGACTGAAGTTTTTAGCCAGCATGGA
CCTAACCTACTTTTTGGGATAAAATCTCTGTTTTGTACAGGCAAAATCTGGTATGGCGTGAATGCCATGGGT
CATTCTGAATATATTTTTTCTGTAATTTTATCATTACACGATGTTTGCAATACGTGCTTTGTTTTTAAATTGA
AAGCAAACCTTTCTACTGTTGAAAGACATTTTTTGACAACCTTGACCCTTCCTAGTATTGAGTTCTAAGTTGAGGA
CTGCATCTTCTCGTTTTTTACAGTATAGAGAACAAAATGACATGAGTTTGAAAAATACATATCACTTGGTATTGC
TGTCTTGGTTGCAGTGGTGATACAGAATTGGTTTTCAATTAATTCCTACATGGTTGAGAATCACTGATCAAGAAAGT
GGGGGGAAAAAACAACGTTAAACCTCAATCCTCAGTAGGAAGGTAGATTACATTAGGTGAAATTATAGGTA
ATCTATGTATGTGCTAATGGGGTTGGAAAGAACCTTACAGAGCATATTACCTGATAAACTGGAGTGGGTTTGGGA
GAACAACTAATAGGATTATTGTGTCTCCTAGTTGGTACCTGGGAGCAATTGACATGCCCCCTTCAGAACCTTAA
CTGTTAGTAGCAGTGGCTGTAACAACACAAACAGTGACCAGAGATAACAGCTTTTAGGCCAAGCTGGCCTGACG
GTATGGCTGCAGGAAGTGACTGAGCAGTAGCGGTACTCAGCCAGACCAAGACGGAGAGGGAAGAGTCCACAGCTT
TCTGGAAGCTAAGGCATTCTGGTGGTAGAAAAGTGTGCCCAAGCCTTCATGGACGAGTTATAGGTCTTAAGATT

WO 2004/030615

PCT/US2003/028547

3300/6881

FIGURE 3044B

AGTCTCCTCTTGTTTGGATTCCATACTTGCTAAATAACCTGATAATAACCTGGTTTTCCATGTAAGTGCCTCTAG
GAAGAAAATGTACTGTTTCATGCTGACACAGATATTTTCAGTCTGCATGGTAAAAGTTCTAAATCTTACTACAAAAT
AATAAACTGGCTGGTTTATAATGTG

WO 2004/030615

PCT/US2003/028547

3301/6881
FIGURE 3045A

GACAGGGAAGGTACCCGGCTCTACTGCCCGTCCCGGACGACTCATCCTGGCGGACTGTGCAGTCCCACCCTGACT
TCAGCCTCAATTTCCAGGAAACAGGCTCCTTCTCTTCTCCCATCTGCTACCAGAGCCGGGAGAGCTGCTCGGAGA
CGCCTCCGGGGTTCGGGCTGGACATGAGCAGCGGCTGCCGGTCTGGGACTAGGCCCCGCCATTTTGGATCCGCT
GACAGGTTTGCCAAGATGGTGGATAAGAATATTTACATCATTCAAGGGGAGATTAACTTTGGTTGGGGCCATC
AAACGAAATGCCCGATGGAGCACCCATACACCACTGGATGAAGAACGGGATCCTCTGCTGCATAGTTTCGGTCAT
CTAAAGGAGGTTTAAACAGTATAACAGAACTCTCAGAAATTGAGCCCAATGTATTCTTCGACCTTTTCTGGAA
GTGATTGCTCTGAAGATACCACTGGCCCTATCACTGGACTGGCACTCACCTCTGTCAACAAGTTCTGTCTAT
GCACTCATAGATCCCACCCATGAGGGCAGCAGAGGGCATGGAGAACATGGCAGATGCTGTCAACCATGCTCGT
TTTGTGGGCACGGATCCTGCCAGTGATGAAGTTGTCTGTATGAAAATCCTTCAGGTTCTACGGACTCTGCTGCTA
ACCCAGTGGGTGCCACCTAACCAATGAATCTGTGTGTGAGATTATGCAGTCTTGCTTCCGGATCTGCTTTGAA
ATGAGGCTCAGTGAGTTATTGAGAAAATCCGCAGAGCACACTCTCGTAGACATGGTGCAGCTGCTCTTACAAGG
TTACCTCAGTTTAAAGAAGAACCAAGAATATGTGGGGACCAACATGAAGAAGCTGAAAATGAGAGCCGGAGGC
ATGAGTGATTTCATCAAATGGAAGAAACAGAAGAGATCCCCTCGGCCCCACGCCATATGACCAAAGTCACACCA
GGTTCAGAGCTGCCCACTCCCAATGGAACACCTTATCATCTAACCTCACTGGTGGCATGCCCTTCATTGATGTG
CCCCTCCCCTCTCTCTGCAAGTTTCAAGAGCTGCCTCAGCAGTGGTCAGTCCCTCTACAGACAGTGGCCTGGAA
TTCTCTCCCAAACCACTTCCAAGGAAGACCTTACTGATCTAGAGCAACCTGGCTCTCCAGGGTACAGCACAGCT
ACAGAGCCTGGAAGCAGTGAGCTAGGTGTTCCCGAGCAGCCTGACCTCCAGGAAGGGACCCATGTGGAAAAGTCC
CAGTCAGCATCTGTGGAGTCCATCCCTGAAGTGTTAGAGGAGTGACGTCCCCTGCCGACCACTCTGACTCTGCC
TCTGTCCATGACATGGATTACGTCAATCCCCGGGGCGTGCGCTTTACACAGTCCCTCCAGAAAGAAGGCACAGCT
TTGGTCCCCTATGGTCTTCCCTGCATCCGCGAGCTCTTCCGCTTCCCTCATCTCCCTCACCATCCACAGACCGC
CATACTCAGAGGTTATGATTACATGGGACTGCATTTGCTGACAGTGGCCCTTGAGTCAGCCCTGTAGCCAG
TGCCAGACCCTCTTGGGCCTCATCAAGGATGAGATGTGCCGTCACTTATTCCAGCTACTCAGCATAGAGCGACTA
AACCTTTATGCTGCTTCCCTGCGAGTATGCTTCTCTACTGTTTGAGAGCATGCGAGAGCACCTCAAGTTCCAAATG
GAGATGTACATCAAAAAGCTTATGGAGATCATCACTGTGGAGAACCCCAAGATGCCTTATGAGATGAAGGAGATG
GCACTGGAGGCCATTGTGCAGCTCTGGCGCATCCCAGCTTTGTACAGAGCTCTACATCAACTATGATTGTGAC
TACTACTGTTCCAACCTCTTTGAGGAAGCTCACAAGCTGCTGTCCAAGAATGCCTTCCCTGTGTCTGGTCAACTC
TATACAACACACCTACTATCTCTTGATGCCCTATTGACAGTGATTGACAGCACCGAGGCCCACTGCCAGGCTAAA
GTCCTCAACAGCCTCACCCAGCAAGAGAAGAAGGAGACAGCCAGACCAAGCTGTGAGATAGTAGATGGCAGCCGA
GAAGCTAGCAATACTGAGAGAAGTCCAGCGATGGGAAAGCTGTAGGCATGGCCTCAGACATCCCAGGCCCTGCAT
CTGCCAGGTGGAGGGCGGCTGCCACCAGAACATGGGAAATCAGGATGCAGTGATCTGGAGGAAGCTGTTGACTCT
GGGGCTGACAAAAAGTTTGGCCGAAGCCACCCCGATTTTCTGTCTCCTGCCAGATCCACGGGAAGCTAATTGAA
ATTA AAAACAAAAGAAGCTGCTAATCACTGGCACAGAGCAGTTCAATCAGAAACCAAGAAGGGGATTGAGTTT
CTGCAAGAGAAAGGCCTCCTCACCATCCCAATGGACAACACAGAGGTTGCTCAGTGGCTCCGAGAGAACCCTCGG
CTGGACAAGAAGATGATTGGAGAGTTTGTGAGTGACCGCAAAAACATTGACCTGTTGGAGAGCTTTGTGAGCACC
TTCAGTTTTTCAAGGCTCTGCGACTGGACGAAGCCCTCCGCTCTACCTGGAAGCCTTCCGTTTGCTGGGGAAAGCA
CCAGTCATCCAGAGGTTGCTGGAGGCATTACAGAGCGTTGGATGAATTGTAATGGCTCCCCATTTGCCAATAGC
GATGCCTGCTTTTCCCTGGCCTATGCTGTCTCATGCTTAATACTGACCAGCACAAACCAATGTTTCGTAAACAG
AATGCACCCATGACCCTGGAGGAGTTTCGCAAAAATCTGAAAGGTGTGAATGGAGGCAAGGACTTTGAGCAAGAC
ATCCTGGAGGACATGTACCATGCCATCAAGAATGAGGAAATTGTAATGCCAGGAGCAGACAGGCTTGGTTCCG
GAGAACTATGTGTGGAATGTGCTGCTTATCGAGGTGCCACCCCTGAGGGCATATTCTGCGTGTGCCTACTGCC
AGCTATGATCTTGACCTCTTACCATGACCTGGGGCCCCACTATTGTGCTCTCTCTTATGTCTTTGACAAAAGC
CTTGAGGAGACAATCATCCAGAAAGCCATCTCAGGCTTCAGGAAGTGCGCCATGATCTCCGCCCCACTATGGCCTC
AGCGATGTGTTTGACAATCTCATCTCTCTATGCAAATTCACAGCTCTCAGCAGTGAGTCTATTGAGAACCTG
CCCAGTGTATTTGGAAGCAACCCTAAAGCCCATATTGCAGCCAAGACAGTATTCCATTTGGCCCATCGTCATGGT
GACATCCTGCGGGAGGGCTGGAAGAATATCATGGAGGCCATGCTGCAGCTCTTCCGAGCCCCAACTACTGCCCAAG
GCTATGATAGAGGTAGAAGATTTCTGTGATCCCAATGGCAAGATCTCTCTACAGCGGGAAGAGACACCATCAAAC
CGAGGAGAGTCAACAGTGCTGAGCTTTGTGAGCTGGCTAACACTGAGTGGTCTCTGAGCAGTCTAGTGTTCGGGGC
CCATCCACTGAAAACCAAGAGGCCAAGAGAGTGGCCTTAGAGTGTATAAAGCAATGTGACCCAGAAAAAATGATC

WO 2004/030615

PCT/US2003/028547

3302/6881
FIGURE 3045B

ACAGAAAGCAAGTTCCTCCAGCTGGAGTCACTACAGGAGCTCATGAAGGCTCTGGTCTCAGTGACACCAGATGAA
GAGACATATGATGAGGAAGATGCTGCTTTCTGCCTAGAGATGCTGCTAAGGATTGTGTTGGAGAACAGGGATCGT
GTGGGCTGTGTGTGGCAGACTGTTTCGAGACCATCTATACCACCTCTGTGTTTCAGGCACAAGATTTCTGCTTCCTT
GTGGAGCGGGCAGTGGTGGGGTTGCTACGCCTGGCCATTTCGGCTTCTCCGGAGAGAAGAGATCAGTGCTCAGGTG
CTGCTCTCCCTGCGCATTTTGTACTGATGAAGCCAGTGTGCTATCCCGAGTCAGCCACCAGGTTGCGTATGGG
CTCCATGAACCTCTGAAGACCAATGCAGCCAACATCCACTCAGGTGATGACTGGGCCACACTCTTCACACTGCTG
GAGTGCAATCGGCTCAGGTGTGAAGCCTCCAGCTGCTCTGCAGGCCACAGCCAGGGCAGATGCACCTGATGCCGGG
GCCCAGTCAGATAGTGAGCTCCCATCTACCATCAGAATGACGTGAGCCTGGATCGAGGGTACACTTCGGACTCA
GAGGTCTACACTGACCATGGCAGGCCGGGCAAGATACACCGATCAGCCACAGATGCCGATGTGGTCAACAGTGGT
TGGTTAGTGGTTGGGAAGGATGACGTTGATAACTCCAAGCCAGGGCCCAGCCGCCAGGCCCTTCACCCCTGATC
AATCAATACAGCCTAACAGTGGGACTGGATTTGGGGCCACACGACACTAAGTCTCTGCTTAAGTGTGTGGAAATCG
CTGTCTTTCATCGTGCCTGATGCTGCCCCATCACACCTGACAACCTTTGAGCTCTGCGTCAAGACTCTCCGGATC
TTTGTGGAGGCCAGTCTGAATGGCGGATGCAAGTCCAGGAGAAACGTGGCAAGAGTCACAAATATGACAGCAAA
GGGAACCGCTTCAAGAAGAAATCCAAAGAGGGATCAATGCTTCGCCGGCCTCGAACCTCCAGCCAACATGCCTCT
CGGGGCGGGCAGAGTGATGATGATGAGGACGAAGGCGTGCTGCCAGCTACCATACGGTGTCTTTACAGGTCACT
CAGGACTTGCTAGACCTGATGCACACCCTGCACACGCGGGCAGCCTCTATCTACAGCTCATGGGCGGAGGAGCAA
CGCCACCTGGAGACAGGTGGCCAGAAGATTGAAGCTGATTCTCGCACCTCTGGGGCCACTGCTGGTGCCCTTTA
CTGCAGGGTATTGCTGCTGTGCTGCGATGCCCCGGCGCCAGGTACGGATGCAGGCACCTGACCTATCTGCAGCGA
GCACTACTTGATGATGCTGCAAAAGCTAGATGCCCTGGAATGGGAGTCCTGTTTTAAACAGGTGCTGTTTCCT
CTACTTACCAAGCTCTTGAGAACATCAGCCCTGCAGATGTGGGTGGGATGGAGGAGACCCGGATGAGGGCTTCC
ACATTGCTCTCTAAGGTCTTCCTGCAGCACCTGTCTCCACTGCTGTCACTCTCTACCTTTGCGGCCCTCTGGCTC
ACCATCTTGGAATTCATGGACAAGTACATGCACGCAGGCTCCAGCGACTTACTGTGAGAGGCGATCCCTGAGTCT
CTGAAGAACATGCTTCTGGTGATGGACACAGCGGAGATTTTCCACAGTGCAGATGCACGGGGAGGCGGCCCTCG
GCCCTCTGGGAGATCACCTGGGAACGCATTGACTGTTTTCTCCCTCACCTACGAGATGAACCTCTTCAAGCAGACC
GTCATCCAGGACCCCATGCCCATGGAGCCTCAAGGCCAAAAGCCTCTCGCCTCAGCCCACCTGACTTCCGCTGCT
GGCGACACTAGGACACCTGGCCATCCACCGCCCCCAGAGATTCCATCTGAGCTGGGGGCTGTGACTTTGAGAAG
CCCGAGAGCCCCCGAGCCGCCAGCAGCAGCTCCCCAGGATCACCAGTGGCCTCAAGCCCCAGCAGGCTGAGCCCC
ACCCCCGACGGGCTCCACCTTGCGCTCAGCCCCCACTGATCCTGCAGCCCTTGGCCTCCCCACTGCAGGTGGGC
GTGCCACCTATGACTCTGCCCATCATCCTCAACCCTGCGCTCATCGAGGCCACCTCACCAGTGGCCCTCCTGGCC
ACACCCCGCCCCACAGATCCCATACCCACCTCTGAGGTCAACTAAGGAGGTCAGTCAAGATCAGGACCAGTGC
TTCCACAGGCTTTTCTTGACCCCACTTCTGGCTGTCTGCGGGCCACAAGCTCTTCAGGCCAAGTCAGAGCTG
CTGTTGCTGCCACTTGATGGGGACCTGAAAAAGAGAAATGTTGATAGCCCCAGCTAAGACCCCAATCAGCTGTG
GGACCTTTTTCTCTCTGCGCTCCATTCTGGGGGTTTCAGCCTGAGAGTGAATCAGCTGTCTATCTGCAGCCTC
TGCTCCAGCCCGGCAGCTCTGGGGAGGCATCCGTGTGCCGGCCCTGCAGTGCCTGCCACGGTCAGGCATTGAA
AACTAAGCCCAACCACTCTGCACTTTGTTTCCACTCCCATTAGCCCTGGGCCACCTCCTCCAGTTCTTCTCTT
TTACTAATTAGTTGGTCAGTTTGGAGAGTTGACTGGCACCATGGAGGGTAGGCAGGTGGGGGCTGGGTGGGGGAC
TGCCACAGGAGCATGTACATATGAAAAACAGAACAACAGTGGACTTTTATGATATAATAAATGCTTAGTAC

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WO 2004/030615

PCT/US2003/028547

3303/6881
FIGURE 3046

MVDKNIYIIQGEINIVVGAIKRNARWSTHTPLDEERDPLLHSFGHLKEVLNSITELSEIEPNVFLRPFLEVIRSE
DTTGPIITGLALTSVNKFLSYALIDPTHEGTAEGMENMADAVTHARFVGTDPASDEVVLMKILQVLRLLLLTPVGA
HLTNESVCEIMQSCFRICFEMRLSELLRKS AEHTLVDMVQLLFTRLPQFKEEPKNYVGTNMKKLKM RAGGMSDSS
KWKQKRSRPPRRHMTKVTPGSELPTPNGTTLSSNLTGGMPIFIDVPTPISSASSEAAASAVVSPSTDSGLEFSSQT
TSKEDLTDLEQPGSPGYSTATEPGSSELGVPEQPDLOEGTHVEKSQSASVESIPEVLEECS PADHSDSASVHDM
DYVNPGRVRFQTSSQKEGTALVPYGLPCIRELFRFLISLTNPHDRHNSEVMIHMGHLHLLTVALESAPVAQCQTLL
GLIKDEMCRHLFQLLSIERLNL YAASLRVCFLLFESMREHLKFQMEMYIKKLMEIITVENPKMPYEMKEMALEAI
VQLWRIPSFVTELYINYDCDYCSNLFEELTKLLSKNAFPVSGQLYTTLLSLDALLTVIDSTEAH CQAKVLNSL
TQQEKKETARP SCEIVDGTREASNTERTASDGKAVGMASDIPGLHLPGGGRLPPEHGKSGCSDLEEAVDSGADKK
FARKPPRFSCLLPDPRELIEIKNKKLLITGTEQFNQPKKGIQFLQEKGLLTIPMDNTEVAQWLRENPRLDKKM
IGEFVSDRKNIDLLESFVSTFSFQGLRLDEALRLYLEAFRLPGEAPVIQRLLEAFTERWMNCNGSPFANS DACFS
LAYAVIMLNTDQHNHNVRKQNA PMTLEEFRKNLKG VNGGKDFEQDILED MYHAIKNEEIVMP EEQTGLVRENYVW
NVLLHRGATPEGIFLRVPTASYDLDFMTWTGPTIAALSYVFDKSLEETIIQK AISGFRKCAMISAHYGLSDVFD
NLIISLCKFTALSSESIENLPSVFGSNPKAHIAAKTVFHLAHRHGDILREGWKNIMEAMLQLFRAQLLPKAMIEV
EDFVDPNGKISLQREETPSNRGESTVLSFVSWLTLSGPEQSSVRGPSTENQEAKRVALECIKQCDPEKMITESKF
LQLES LQELMKALVSVTPDEETYDEEDAAFCLEMLLRIVLENRDRVGC VQTVRDHLYHLCVQAQDFCFLVERAV
VGLLR LAIRLLRREEISAQVLLSLRI LLLMKPSVLSRVSHQVAYGLHELLKTNAANIHS GDDWATLFTLLECIGS
GVKPPAALQATARADAPDAGAQSDSELPSYHQNDVSLDRGYTSDSEVYTDHGRPGKIHR SATDADVNSGWL VVG
KDDVDNSKPGPSRPGPSPLINQYSLTVGLDLGPHDTKSLLKCVESLSFIVRDAAHITPDNFELCVKTLRIFVEAS
LNGGCKSQEKRGKSHKYDSKGNRFKKKSKEGSM LRRPRTSSQHASRGQSDDDEDEGV PASYHTVSLQVSQD LLD
LMHTLHTRAASIYSSWAEQRHLETGGQKIEADSR TLWAHCWCFLQGIACLCCDARRQVRMQALTYLQRALLVH
DLQKLDAL EWESCFNKVLFPLLT KLENISPADVGGMEETRMRASTLLSKVFLQHLSP LLSLSTFAALWLTILDF
MDKYM HAGSSDLLSEAIPE SKNMLLVMDTAEIFHSADARGGGSALWEITWERIDCF LPHLRDELFKQTVIQDP
MPMEPQGQKPLASAHLSAAGDTRTPGHPPPPEIPSELGACDFEKPES PRAASSSSPGSPVASSPSRLSPTPDGP
PPLAQ PPLILQPLASPLQVGVPMTLP IILNPALIEATSPVPLLATPRPTDPIPTSEVN

WO 2004/030615

PCT/US2003/028547

3304/6881
FIGURE 3047

CTCGTTGGTGGGGCTGGGGGATGAGAGCTGCACCGCGCGGGACAAGTCGCCGGCGGCGCCCGACGGAGCAGAAGA
GAGAGCATGGAGCTGGAGAGGATCGTCAGTGCAGCCCTCCTTGCCCTTGTCCAGACACACCTCCCGGAGGCCGAC
CTCAGTGGCTTGGATGAGGTCATCTTCTCCTATGTGCTTGGGGTCCCTGGAGGACCTGGGGCCCTCGGGCCCCATCA
GAGGAGAACTTCGATATGGAGGCTTTCACCTGAGATGATGGAGGCCTATGTGCCTGGCTTCGCCCACATCCCCAGG
GGCACAATAGGGGACATGATGCAGAAGCTCTCAGGGCAGCTGAGCGATGCCAGGAACAAAGAGAACCTGCAACCG
CAGAGCTCTGGTGTCCAAGGTCAGGTGCCCATCTCCCCAGAGCCCTGCAGCGGCCCGAAATGCTCAAAGAAGAG
ACTAGGTCTTCGGCTGCTGCTGCTGCAGACACCCAAGATGAGGCAACTGGCGCTGAGGAGGAGCTTCTGCCAGGG
GTGGATGTACTCCTGGAGGTGTTCCCTACCTGTTTCGGTGGAGCAGGCCCAGTGGGTGCTGGCCAAAGCTCGGGGG
GACTTGGAAGAAGCTGTGCAGATGCTGGTAGAGGGAAAGGAAGAGGGGCCTGCAGCCTGGGAGGGCCCCAACCCAG
GACCTGCCCAGACGCCTCAGAGGCCCCCCAAAAGGATGAGCTGAAGTCCTTCATCCTGCAGAAGTACATGATGGTG
GATAGCGCATAGTATCAGAAGATTACCGGCCCATGGCTCCCAAGGAGGCCCCCAAGAAGCTGATCCGATACATC
GACAACCAGGTAGTGAGCACCAAGGGGAGCGATTCAAAGATGTGCGGAACCCTGAGGCCGAGGAGATGAAGGCC
ACATACATCAACCTCAAGCCAGCCAGAAAGTACCGCTTCCATTGAGGCACTCGCCGGACTCTGCCCCAGCCTTCT
AGGCTCAGATCCCAGAGGGATGCAGGAGCCCTATACCCCTACACAGGGGGCCCCCTAACTCCTGTCCCCCTTCTCT
ACTCCTTTGCTCCATAGTGTTAACCTACTCTCGGAGCTGCCTCCATGGGCACAGTAAAGGTGGCCCAAGGAAAAA
AAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3305/6881
FIGURE 3048

MELERIVSAALLAFVQTHLPEADLSGLDEVIFSYVLGVLEDLGPSGPSEENFDMEAFTEMMEAYVPGFAHIPRGT
IGDMMQKLSGQLSDARNKENLQPQSSGVQGQVPISPEPLQRPEMLKEETRSSAAAAADTQDEATGAEEELLPGVD
VLLEVFPTCSVEQAQWVLAKARGDLEEAVQMLVEGKEEGPAAWEGPNQDLPRRLRGPQKDELKSFILQKYMVDS
A

WO 2004/030615

PCT/US2003/028547

3306/6881
FIGURE 3049

GCCTAGCGGGCGGACCCGGCTGGGCAGTTCCTTCCCCAGAAGGAGAGATTCTCTGCCATGGAGTCCTACGATGT
GATCGCCAACCAGCCTGTCGTGATCGACAACGGATCCGGTGTGATTAAAGCTGGTTTTGCTGGTGATCAGATCCC
CAAATACTGCTTTCCAAACTATGTGGGCCGACCCAAGCACGTTTCGTGTCATGGCAGGAGCCCTTGAAGGCGACAT
CTTCATTGGCCCCAAAGCTGAGGAGCACCGAGGGCTGCTTTCAATCCGCTATCCCATGGAGCATGGCATCGTCAA
GGATTGGAACGACATGGAACGCATTTGGCAATATGTCTATTCTAAGGACCAGCTGCAGACTTTCTCAGAGGAGCA
TCCTGTGCTCCTGACTGAGGCGCCTTTAAACCCACGAAAAACCGGGAACGAGCTGCCGAAGTTTTCTTCGAGAC
CTTCAATGTGCCCCGCTCTTTTCATCTCCATGCAAGCTGTACTCAGCCTTTACGCTACAGGCAGGACCACAGGGGT
GGTGTCTGGATTCTGGGGATGGAGTCACCCATGCTGTGCCCATCTATGAGGGCTTTGCCATGCCCCACTCCATCAT
GCGCATCGACATCGCGGGCCGGGACGTCTCTCGCTTCCTGCGCCTCTACCTGCGTAAGGAGGGCTACGACTTCCA
CTCATCTCTGAGTTTGAGATTGTCAAGGCCATAAAAGAAAGAGCCTGTTACCTATCCATAAACCCCCAAAAGGA
TGAGACGCTAGAGACAGAGAAAGCTCAGTACTACCTGCCTGATGGCAGCACCATTGAGATTGGTCTTCCCCGATT
CCGGGCCCCCTGAGTTGCTCTTCAGGCCAGATTTGATTGGAGAGGAGAGTGAAGGCATCCACGAGGTCTGGTGTT
CGCCATTGAGAAGTCAGACATGGACCTGCGGCGCACGCTTTTCTTAACATTGTCCTCTCAGGAGGCTCTACCTT
GTTCAAAGTTTTGGTGACAGGCTCCTGAGTGAAGTGAAGAACTAGCTCCAAAAGATGTGAAGATCAGGATATC
TGCACCTCAGGAGAGACTGTATTCCACGTGGATTGGGGCTCCATCCTTGCTCCCTGGACACCTTTAAGAAGAT
GTGGGTCTCCAAAAGGAATATGAGGAAGACGGTGCCCGATCCATCCACAGAAAAACCTTCTAATGTCGGGACAT
CATCTTCACCTCTCTCTGAAGTTAACTCCACTTTAAACTCGCTTCTTGAGTCGGAGTGTTTGCAGGAACTGC
CTGTGTGTGAGTGCGTGTGTGGATATGAGTGTGTGTGCACATGCGAGTGCCGTGTGGCCCTGGGACCTTGGGCCC
AGAAAGGACGATGAACCTGCAGTGGTGATGGCTGAGGCTGGGGTTGACCACTAACTGGCTCCTGACAGGG
AAGAGCGCTGGCAGAGGCTGTGCTCCCTCCTCAGGTGGCTCTGGCTGGCTGTGGGGGACTCCGTTTACTACCAC
AGGGAGACAGAGGGAGGTAAGCCATCCCCCGGGAGACCTTGCTGCTGACCATCCTAGGCTGGGCTGGCCCCACCC
TCACCCCCACCCCCAGGGTGCCCTGAGGCCCCAGGCAGTGTGCTCCCTCACTATCGATGCCTCCTGACTGCACAC
TGAGGACTGGGACTGGGGTTGAGTTCTGTCTGGTTTTGTTGCCATTTTGGTTTGGGAGGCTGGAAAAGCACCCCA
AGAGCTATTACAGAGACTGGAGTCAGGAGAGAGCAGGAGGCCCTCATGTTTACCAGGGAACAGGACCACACCGGC
CACTGGAGGAGGGCAGGAGCAGTCCCTCACTCTGAATGGCTGCAGAGTTAATGTTCCCAGCCAGTCCCTTTTCGG
GGGCCTTGGGAGAGTTTTAAGGCACCTGCTGGTTCCAGGACCTCGCTTTCCATCTGTTCTTGTTGCAATGCCATCT
TCAAACCGTTTTATTATTGAAGTGTTTGTTCAGTTAGGGGCTGGAGAGAGGGAGCTTGCTGCCTCCTGCCTTGC
TACACTAATGTTTACAGCACCTAAGCTTAGCCTCCAGGGCCCCACCTCTCCCAGCTGATGGTGAGCTGACAGTGT
CCACAGGTTCCAGGACCATTGAGATTGGAAGCTACACTCAAAGACACTCCCACCAGGCTCTTTCTCCCTTTTCC
TCTTGCTCACTGCCCTGGAATCAACAGGCTGGTTGCTGGTTAGATTTTCTGAAACAGGAGGTAAAATTTTTCTTT
GGCAGAGGCCCCTAAGCAAGGGAGGGGTGTTGGAGAGCCAGTGCCCTTAAGACTGGAGAAAGCTGCAATTTACCA
AGTTGCCTTTTGCCACTGTAGCTGACCAGGGGACTAGGTTGTAGAGGTGGGAAGGCCCCCTCTGGGCTGATCTTG
TGCCATTCTTGACCTTGACCTGCTTGGTTAAGGAGGGAGTGGGCCAGACCAGAGTGCCAGGAGCTAATGGAGCC
AGGCCTGACTCCTAGGAGTGGTCCAAAGGCCCTTCAGCCTAGATGGTGAAAGCTGGGGCCAGCCTGTCTTCACCG
GCACCTCACCTGTGACACCAAGACCCACCCCAATCCAGACTTCACACAGTATTCTCCCCACGCCGTCTATG
ACCAAAGGCCCTGCCAGGTGTGGGCCACAGCAGCAGGTATGTGTGAAAGCAACGTAGCGCCCCGCGGACTGCAG
TGCGCTTAACCAACTCACCTCCCTTCTCTTAGCCCAAGCCTGTCCCTCGCACAGCCTCGCACAAACCACATTGCC
TGGTGGGGCCAGTGTAAGTAAAGTCGTTCCGATAGACACGTC

WO 2004/030615

PCT/US2003/028547

3307/6881
FIGURE 3050

MESYDVIANQPVVIDNGSGVIKAGFAGDQIPKYCFPNYVGRPKHVRVMAGALEGDIFIGPKAEHRGLLSIRYPM
EHGIVKDWNDMERIWQYVYSKDQLQTFSEHPVLLTEAPLNPRKNRERAAEVFFETFNVPALFISMQAVLSLYAT
GRTTGVLDSGDGVTHAVPIYEGFAMPHSIMRIDIAGRDVSRFLRLYLKKEGYDFHSSSEFEIVKAikeracyls
INPQKDETLETEKAQYYLPDGSTIEIGPSRFRAPELLFRPDLIGEESGIHEVLVFAIQSDMDLRRTLFSNIVL
SGGSTLFKGFGRLLSEVKKLAPKDVKIRISAPQERLYSTWIGGSILASLDTFKMWVSKKEYEEDGARS IHRKT
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WO 2004/030615

PCT/US2003/028547

3308/6881
FIGURE 3051A

CGCCGTGCGCAGGCGCGGAGCTAGACCTCGCTGCAGCCCCCATCGCCTCGGGGAGTCTCACCCACCGAGTCCGCC
CGCTGGCCCCGTAGTGCTCTCCCCGTGCTTTGCCCTCTCCAGTTCCCCCAGTGCCTGCCCTACGCACCCCGATGG
CGGAGCTGCGGCCTAGCGGGCGCCCCCGGCCCCACCGCGCCCCCGGCCCTGGCCCCGACTGCCCCCCCGGCCCTTCG
CTTCGCTCTTTCCCCCGGGACTGCACGCCATCTACGGAGAGTGCCGCCGCTTTACCCTGACCAGCGGAACCCGC
TCCAGGTTACCGCTATCGTCAAGTACTGGTTGGGTGGCCAGACCCCTTGGACTATGTTAGCATGTACAGGAATG
TGGGGAGCCCTTCTGCTAACATCCCCGAGCACTGGCACTACATCAGCTTCGGCCTGAGTGATCTCTATGGTGACA
ACAGAGTCCATGAGTTTACAGGAACAGATGGACCTAGTGGTTTTGGCTTTGAGTTGACCTTTCGTCTGAAGAGAG
AAACTGGGGAGTCTGCCCCACCAACATGGCCCGCAGAGTTAATGCAGGGCTTGGCACGATACGTGTTCCAGTCAG
AGAACACCTTCTGCAGTGGGGACCATGTGTCTTGGCACAGCCCTTTGGATAACAGTGAGTCAAGAATTACGCACA
TGCTGCTGCAGAGGACCCACAGATGCAGCCCGTGCAGACACCCCTTTGGGGTAGTTACCTTCCTCCAGATCGTTG
GTGTCTGCACTGAAGAGCTACACTCAGCCAGCAGTGGAAACGGGCAGGGCATCCTGGAGCTGCTGCGGACAGTGC
CTATTGCTGGCGGCCCTGGCTGATAACTGACATGCGGAGGGGAGAGACCATATTTGAGATCGATCCACACCTGC
AAGAGAGAGTTGACAAAGGCATCGAGACAGATGGCTCCAACCTGAGTGGTGTGAGTGCCAAGTGTGCCTGGGATG
ACCTGAGCCGGCCCCCGAGGATGACGAGGACAGCCGGAGCATCTGCATCGGCACACAGCCCCGGCGACTCTCTG
GCAAAGACACAGAGCAGATCCGGGAGACCCCTGAGGAGAGGACTCGAGATCAACAGCAAACCTGTCTTCCACCAA
TCAACCTCAGCGGCAGAATGGCCTCGCCACGACCGGGCCCCGAGCCGCAAAGACAGCCTGGAAAGTGACAGCT
CCACGGCCATCATTCCCCATGAGCTGATTGCGACGCGGCAGCTTGAGAGCGTACATCTGAAATTCAACCAGGAGT
CCGGAGCCCTCATTCTCTCTGCTTAAGGGGCGAGGCTCCTGCATGGACGGCACTTTACATATAAAGTATCACAG
GTGACATGGCCATCACGTTTGTCTCCACGGGAGTGGAAGGCGCCTTTGCCACTGAGGAGCATCCTTACGCGGCTC
ATGGACCTGGTTACAAATTCTGTTGACCGAAGAGTTTGTAGAGAAAATGTTGGAGGATTTAGAAGATTTGACTT
CTCCAGAGGAATTCAAACTTCCCAAAGAGTACAGCTGGCCTGAAAAGAAGCTGAAGGTCTCCATCCTGCCTGACG
TGGTGTTCGACAGTCCGCTACACTAGCCTGGGCTGGGCCCTGCAGGGGCCAGCAGGGAGCCAGCTGCTCCCCAG
TGACTTCCAGTGTAACAGTTGTGTCAACGAGATCTCCACAAATAAAGGACAAGTGTGAGGAAGACTGCGCAGTG
CCACCCCGCAGCCAGTGGGGTGCCATGCACAGGCCACAGGCCCTCCACCTCACCTCCAGCTCAGGGGCCGCACC
CCGCCGCTGGCTAAGCCTTGTGACCCATCAGGCCAGTGAGTGGGCAAATGCGGACCCTCCCTGCCTGCAGCCTGC
ACAGATTCTGGTTTGAGGTTTGACTCTGGACCCTGGCTGTGCCCCCTAGGTGGAGACAGCCCTCTTTCTCACCTAC
CCCCTGCCGCACAGCCCAGCAGGAGGGAGGCGGACAGCCAGATGCAGAGCGAGTGGATGCACTTCCCAGCTCATC
TCTGGAAGCCTTTGCTACTCAAGCTCCTCTGGCCGCGGAACAATTCTCTGATCATGTTTGGTTTTCTTCTTCT
TATTTTATTTTGTAGAAACCGGGTGGTATTTTATTGCTCTGCAAAGATGTCCAGAAGCCATGTATATAATGTTTT
TTAAACAGAACTTCATTCCCCGTTGAACTTTCGCATTCTCTGACAGAGGCCTAGGGCTGTATCTCTCCCTGGGCT
GCCACCAGAGAAGGTGCTTGGTGTTCGCCTGCCAGCCAGAGCCCTGGAGGAGCCGGCTGCACAGAGAGGCTTTT
CTTCCCAGCTGGGCCTGATGGAGCCCGGGGACAGGGGAGAGTAGAGACACTCCCTTGTGCAGCTTTGAGCCTAGT
TTAGCTGGGGCCAGGGAGGGGTGCTACTGTTTTCAAGTGAATGGGTCTCAAAGACTTGGTGACCCAGCCTCAT
CTTCTAGGCCTTTTCCATCCAACCAGGCCTACCTGGGAGAGGGTGAGGTTTCAGCACATCACACACCATCCCCACT
GTCATTACAGGGCCTGGGTCTCCAGCTCTGTAACCAGTCTGTGCCATTTCCTCAGTCCCTGGGCCTCCAGCCTT
CAGGCTGTAGGGCTGCCTTACTAAAATTGAAAAATCCACCTCTTAACATCTCTTTCACTTTGGTTTTGCTAACAC
TGCTCTCTGCTGCCCTCCCATCTCCCTGTATCCATTGCTGCTTCTTTCACTTCTCCACTCCTAATCCCTCTC
CTTTCTGGCATCCTGGCCTCTCGTGGTCTCAGCCCTCACCCCCAGTACTGCAGATCTCACAGTTTGCCTTCCA
GAAGCCAGCCTATCTCTAGCCCATGGTTTTGGAGTTCTCTCGGGTTATCTCCACGCCTGACCTGGAACCAGCA
AGCCCTTTCTGCTTCTTACCCCAACTCTAGGGATGGGACTGTTACAATACTTCAAGATCACTCTTTACACC
TCTTCAAAGCAAAGTCATGACAATGCAGGGCTCCTCATTGCTCCCATCTGCCTCTGCTGCACACACAGGCACCAG
CAGGGATGCCACAGGAGTGCCACAGGGTGACAGGACTCCACTGATGAGAGATCCAGCCAAAGAGCTGCCCCAGG
GGTATGAGGGCACCAGCTGGGTCTCCAGGGAGCAGGAGTTGGACCTCCATGGAGCCACTAGGCCTGGCCTCCTC
TACACATCCCCAGGGCTATCTGGTTAATTCCATCAAGCTCAGAGTTAAAAGGCATATCAGCCTGGAGTATTTGGG
AGAGACTGGCTGCAGATCCCCGCCAGCCAAGATGAAGCCACTCGGGACCTGATGTGCGGAGCTGTGCCCTTACT
GCCCTGAGGACTTACCAGAGGGAGCCCTACTGGCCTTCCCCACCACAGCAGCCCTGCCTGTGAAGCTCTTGT
CTGACATTTACAGGCAGAGAGGTGCCATCAGTTGCGCTCCATTCTTGGCACCATGACCAGCCTCTCCCTGAAC
TCTCTTGTGCTCGGGACCTGCCTGAGGGCTCCCTGCTGCAGTTGCGCGTACTTCCATCTGCTGGGTGCCTCCATC

WO 2004/030615

PCT/US2003/028547

3309/6881
FIGURE 3051B

GTGGTTGGGTGGGGATGGGGCATTCTTGAGCTAAGCTTTGTCATTAGTTTGTGAAGCACCTGGTCAGCAACCT
GCCCCAGACCTGGAGGGTCTTTGTGGACTGAAGGTAGACACCAGCCAGCATGGTGGCCCTGTTCTGGGGGAGCAG
GGTAAGGCAGGAGGAAGTGGGTGAGCTCCGAGATGATGAGCACATGAAGCCTGTGGCCCTTCGTACCTGCAATA
TGTCAGGAGCCTCACGCTCACCCAAGATCCTGCAGGGGCCAGGCTCCATCTCACTGGCTCTGAGGGCAGGACAGG
GTATCACACATTTCTACCCAGGCCTCCTTTCTATGGGCATTGGTGCCTCCCAGAGGTTTCTTGGGCTGCTGGCT
GGTGAGAGAGGACCCTTAAAGAAGATCAAGCCAAGCTGACCTTGGACCCTGTCCAGCACAGCTTCTGGCACAGGA
TGCTTGGTGAATGTACCCTTTCTTTCCCTCCCTGCAGCTCTGAGGGAGCCCCTGACCTTGTAGTGGGTGGAGGAG
GTAAGGGGCCTCCCTCCCTAAATCTGCCTCTTCTGCAAGCTACTTGGAGACTTGCCTAGTTGTACCCACCCCTCC
AGGTCCCTGGTGCTAGAGCTTCTGAGAAGGGCCTTTCCCTTTCTCTTTGCCTGCTATATAAGGCAGGCTCCTGT
GGCTCTGCTGGCTCAGTGTGGGCTGCAGGAGGACTGCAGACTCAGCTGCAATTCTGAGGGGGGTTTGGGAGGCTT
GTGCGAGGTCTCAGGCCTGTGTGGGGAGCTGGTGCCTCTTCCCTGCCCCTATCTTTCTCTTCCAAGGGCAGTGCTC
CAAGGCAGGGACTGGAGAAGCCAAGGGGAGAGTCTAAAAGGGCTAGAGCATTTTTAAAAATAGACACAGGGTCTT
GGGACTGGGGTTTCGGATTGAGTTGCAAGCAGGGAGAAAACCTGAAGGTCGGTGCCCTATGGGGCTGACCAGTA
GAGAATTTCCCTTTACTGTATTTTGTGTCTGGTCTTCCCTTTCTGGCTTCTAGGACATCCATGCCAGGTGAGGTG
CCTGGGTCCCTGTTACAAGTCAGGAGCCCTGTAGGGAGACCCCTCCTTTTGTACAAGTACCTGAATGCTGCGACA
AGCAGATTTTGTAAAATTTTATATTAGTTTTTAATGTCAGTGGCGACTCGGTTCCCTGGGGCTGCAGCCAGCCTG
GGACTTTTGTAGAATTTTGGGTGACTCACTTAGATGTCGTTTCCTTCTTGCCCCCTCTTCCTCTCTGTAATCT
AAGTGCATTAAACATCTTTGCAG

WO 2004/030615

PCT/US2003/028547

3310/6881
FIGURE 3052

MAELRPSGAPGPTAPPAPGPTAPPAFASLFPPGLHAIYGECRRLYPDQPNPLQVTAIVKYWLGGPDPLDYVSMYR
NVGSPSANIPEHWHYISFGLSDLYGDNRVHEFTGTDGPSGFGFELTFRLKRETGESAPPTWPAELMQGLARYVFQ
SENTFCSGDHVSWHSPLDNSESRIQHMLLTEDPQMOPVQTPFGVVTFLQIVGVCTEELHSAQQWNGQGILELLRT
VPIAGGPWLITDMRRGETIFEIDPHLQERVVDKGIETDGSNLGVSAKCAWDDLSPPEDEDSRSICIGTQPRRL
SGKDEQIRETLRRGLEINSKPVLPPINPQRQNGLAHDRAPSRKDSLESSTAIIPHELIRTRQLESVHLKFNQ
ESGALIPLCRLRGRLLHGRHFTYKSITGDMAITFVSTGVEGAFATEEHPYAAHGPWLQILLTEEFVEKMLEDLEDL
TSPEEFKLPKEYSWPEKKLKVSILPDVVFDSPH

WO 2004/030615

PCT/US2003/028547

3311/6881
FIGURE 3053

AGCAGCGGCGGGGGCCCCGAGGGATTCTGAAGGAAGATTTCCATTAGGTAATTTGTTTAAATCAGTGCAAGCGAAAT
TAAGGGAAAATGGATGTAGAAAATGAGCAGATACTGAATGTAAACCCTGCAGATCCTGATAACTTAAGTGACTCT
CTCTTTTCCGGTGATGAAGAAAATGCTGGGACTGAGGAAATAAAGAATGAAATAAATGGAAATTGGATTTTCAGCA
TCCTCCATTAAACGAAGCTAGAATTAATGCCAAGGCAAAAAGGCGACTAAGGAAAAACTCATCCCGGGACTCTGGC
AGAGGCGATTTCGGTCAGCGACAGTGGGAGTGACGCCCTTAGAAGTGGATTAACGTGCAACCAGTCCAAAGGGA
AGGTTGCTGGATAGGCGATCCAGATCTGGGAAAGGAAGGGGACTACCAAAGAAAGGTGGTGCAGGAGGCAAAGGT
GTCTGGGGTACACCTGGACAGGTGTATGATGTGGAGGAGGTGGATGTGAAAGATCCTAACTATGATGATGACCAG
GAGAACTGTGTTTATGAACTGTAGTTTTGCCCTTTGGATGAAAGGGCATTGAGAAGACTTTAACACCAATCATA
CAGGAATATTTTGAGCATGGAGATACTAATGAAGTTGCGGAAATGTTAAGAGATTTAAATCTTGGTGAAATGAAA
AGTGGAGTACCAGTGTGGCAGTATCCTTAGCATTGGAGGGGAAGGCTAGTCATAGAGAGATGACATCTAAGCTT
CTTTCTGACCTTTGTGGGACAGTAATGAGCACAACCTGATGTGGAAAAATCATTGATAAATTGTTGAAAGATCTA
CCTGAATTAGCACTGGATACTCCTAGAGCACCACAGTTGGTGGGCCAGTTTATTGCTAGAGCTGTTGGAGATGGA
ATTTTATGTAATACCTATATTGATAGTTACAAAGGAACCTGTAGATTGTGTGCAGGCTAGAGCTGCTCTGGATAAG
GCTACCGTGCTTCTGAGTATGTCTAAAGGTGGAAAGCGTAAAGATAGTGTGTGGGGCTCTGGAGGTGGGCAGCAA
TCTGTCAATCACCTTGTTAAAGAGATTGATATGCTGCTGAAAGAATATTTACTCTCTGGAGACATATCTGAAGCT
GAACATTGCCTTAAGGAACCTGGAAGTACCTCATTTTCACCATGAGCTTGTATATGAAGCTATTATAATGGTTTTA
GAGTCAACTGGAGAAAGTACATTTAAGATGATTTTGGATTTATTAAAGTCCCTTTGGAAGTCTTCTACCATTA
GTAGACCAAATGAAAAGAGGTTATGAGAGAATTTACAATGAAATTCGGACATTAATCTGGATGTCCCACATTCA
TACTCTGTGCTGGAGCGGTTTGTAGAAGAATGTTTTCAGGCTGGAATAATTTCCAAACAACCTCAGAGATCTTTGT
CCTTCAAGGGGCAGAAAGCGTTTTGTAAAGCGAAGGAGATGGAGGTCGTCTTAAACCAGAGAGCTACTGAAATATAA
GAACTCTTGCACTCTTAGATGTTATAAAAAATATATATCTGAATTGTAAGAGTTGTTAGCACAAAGTTTTTTTTTT
TTTTTTTTTAAACACTTGTTTTGGGTACAAGGCATTTCTGACATTTT

WO 2004/030615

PCT/US2003/028547

3312/6881
FIGURE 3054

MDVENEQILNVNPADPDNLSDSLFSGDEENAGTEEEKNEINGNWISASSINEARINAKAKRRLRKNSSRDSGRGD
SVSDSGSDALRSGLTVPTSPKGRLLDRRSRSGKGRGLPKKGGAGGKGVWGTPGQVYDVEEVDVKDPNYDDDQENC
VYETVVLPLDERAFEKTLTPIIQEYFEHGDNEVAEMLRDLNLGEMKSGVPVLAVSLALEGKASHREMTSKLLSD
LCGTVMSTTDVEKSFDKLLKDLPELALDTPRAPQLVGQFIARAVGDGILCNTYIDSYKGTVDVCVQARAALDKATV
LLSMSKGGKRKDSVWGSGGGQSVNHLVKEIDMLLKEYLLSGDISEAEHCLKELEVPHFHHELVYEAIMVLEST
GESTFKMILDLLKSLWKSSTITVDQMKRGYERIYNEIPDINLDVPHSYSVLERFVEECFQAGIISKQLRDLCP
SRGRKRFVSEGDGGRLLKPESY

WO 2004/030615

PCT/US2003/028547

3313/6881
FIGURE 3055

ATGCCTCCAAAGGTGACTTCAGAGCTGCTTCGGCAGCTGAGACAAGCCATGAGGAACTCTGAGTATGTGACCGAA
CCGATCCAGGCCTACATCATCCCATCGGGAGATGCTCATCAGAGTGAGTATATTGCTCCATGTGACTGTCGGCGG
GCTTTTGTCTCTGGATTGATGGCTCTGCGGGCACAGCCATCATCACAGAAGAGCATGCAGCCATGTGGACTGAC
GGGCGCTACTTTCTCCAGGCTGCCAAGCAAATGGACAGCAACTGGACACTTATGAAGATGGGTCTGAAGGACACA
CCAACTCAGGAAGACTGGCTGGTGAGTGTGCTTCCTGAAGGATCCAGGGTTGGTGTGGACCCCTTGATCATTCCCT
ACAGATTATTGGAAGAAAATGGCCAAAGTTCTGAGAAGTGCCGGCCATCACCTCATTCCCTGTCAAGGAGAACCTC
GTTGACAAAATCTGGACAGACCGTCTGAGCGCCCTTGCAAGCCTCTCCTCACACTGGGCCTGGATTACACAGGC
ATCTCCTGGAAGGACAAGGTTGCAGACCTTCGGTTGAAAATGGCTGAGAGGAACGTCATGTGGTTTGTGGTCACT
GCCCTGGATGAGATTGCGTGGCTATTTAATCTCCGAGGATCAGATGTGGAGCACAATCCAGTATTTTTCTCCTAC
GCAATCATAGGACTAGAGACGATCATGCTCTTCATTGATGGTGACCGCATAGACGCCCCCAGTGTGAAGGAGCAC
CTGCTTCTTGACTTGGGTCTGGAAGCCGAATACAGGATCCAGGTGCATCCCTACAAGTCCATCCTGAGCGAGCTC
AAGGCCCTGTGTGCTGACCTCTCCCCAAGGGAGAAGGTGTGGGTCACTGACAAGGCCAGCTATGCTGTGAGCGAG
ACCATCCCCAAGGACCACCGCTGCTGTATGCCTTACACCCCCATCTGCATCGCCAAAGCTGTGAAGAATTACGCT
GAGTCAGAAGGCATGAGGCCGGCTCACATTAAAGATGCTGTTGCTCTCTGTGAACCTTTTAACTGGCTGGAGAAA
GAGGTTCCCAAAGGTGGTGTGACAGAGATCTCAGCTGCTGACAAAGCTGAGGAGTTTCGAGGCAACAGGCAGAC
TTTGTGGACCTGAGCTTCCCAACAATTTCCAGTACGGGACCCAACGGCGCCATCATTCACTACGCGCCAGTCCCT
GAGACGAATAGGACCTTGTCCTGGATGAGGTGTACCTTATTGACTCGGGTGCTCAATACAAGGATGGCACCACA
GATGTGACGCGGACAATGCATTTTGGGACCCCTACAGCCTACGAGAAGGAATGCTTCACATATGTCTCAAGGGC
CACATAGCTGTGAGTGCAGCCGTTTTCCCGACTGGAACCAAAGGTCACCTTCTTGACTCCTTTGCCCCGTTTCACT
TTATGGGATTACAGGCCTAGATTACTTGCACGGGACTGGACATGGTGTGGGTCTTTTTTGAATGTCCATGAGGGT
CCTTGCGGCATCAGTTACAAAACATTCTCTGATGAGCCCTTGGAGGCAGGCATGATTGTCACTGATGAGCCCGG
TACTATGAAGATGGGGCTTTTGAATTGCAATTGAGAATGTTGTCCTTGTGGTTTCTGTGAAGACCAAGTATAAT
TTTAATAACCGGGGAAGCCTGACCTTTGAACCTTAACATTGGTTCCAATTCAGACCAAAATGATAGATGTGGAT
TCTCTTACAGACAAAGAGTGCAGTGGCTCAACAATTACCACCTGACCTGCAGGGATGTGATTGGGAAGGAATTG
CAGAAACAGGGCCGCCAGGAAGCTCTCGAGTGGCTCATCAGAGAGACGCAACCCATCTCCAAACAGCATTAA

WO 2004/030615

PCT/US2003/028547

3314/6881
FIGURE 3056

MPPKVTSELLRQLRQAMRNSEYVTEPIQAYIIPSGDAHQSEYIAPCDCRRAFVSGFDGSAGTAIITEEHAAMWTD
GRYFLQAAKQMDSNWTLMKMGLKDTPTQEDWLVSVLPEGSRVGVDPLIIPTDYWKMAKVLSAGHHLIPVKENL
VDKIWTD RPERPCKPLLTGLDYGISWKDKVADLRKMAERNVMWFVVTALDEIAWLFNLRGSDVEHNPVFFSY
AIIGLETIMLFIDGDRIDAPSVKEHLLDLGLEAEYRIQVHPYKSILSELKALCADLSPREKVWVSDKASYAVSE
TIPKDHRCMPYTPICIAKAVKNSAESEGMRAHIKDAVALCELFNWLEKEVPKGGVTEISAADKAEFFRQQAD
FVDLSFPTISSTGPNGAIHYAPVPETNRTLSDLDEVYLIDSGAQYKDGTDTVTRTMHFGTPTAYEKECFTYVLKG
HIAVSAAVFPTGTKGHLLDSFARSALWDSGLDYLHGTGHGVGSFLNVHEGPGGISYKTFSDPELEAGMIVTDEPG
YYEDGAFGIRIENVVLVVPVKTKYNFNNGSLTFEPLTLVPIQTKMIDVDSLTDKECDWLNNYHLTCRDVIGKEL
QKQGRQEALWLIRETQPI SKQH

WO 2004/030615

PCT/US2003/028547

3315/6881
FIGURE 3057

CCGTCCAGAGACTGCTGAACCCCTATCCATCTGCTACCACCACCCACTCTGGACACAGAACATCCAGTCATGGAA
AAAAATGAGCTGGTTTCAGAAGGCCAAACTGGCTGAGCAGGCTGAGCAATATGATAACATGGCAGCCTGCATGAAG
TCTGTAACTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGCTTATAAAAAATGTTGTA
GGAGCCCGTAGGTCATCTTGGAGGGTCATCTCAAGTATTGAACAAAAGACGGAAGGTGTTGAGAAAAAACAGCAG
ATGGCTCGAGAATACAGAGAGAAAATTGAGATGGAGCTAAGAGATATCTCCAATGATGTACTATCTCTTTTGGAA
AAGTTCTTGATCTCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTATTGAAAAATGAAAGGAGATTACTACCGT
TACTTGGCTGAGGTTGCCGCTGGTGATGGCAAGAAAGGGATTGTGGGTCAGTCACAACAAGCATACCAAGAAGCT
TTTGAAATCAGCAAAAAGGAAATGCAACCAACACATACGTCTCAGACTGGGTCTGGCCCTTAACTTCTCTTGTCT
ATTATGAGATTCTGAACTCCCCAGATAAAGTCTGCTCTCTTGCAAAGATGGCTTTTGATGAAGGCATTGCTGAAC
TTGATACATTAAATGAAGAGTCATACAAAGACAGCACGCTAATAATGCAATTACCGAGAGACAACCTTGACATTGT
GGACACTGGATACCCAAGGAGACAAAGCTGAAGCAGGAGAAAGAGGGGAAAATTAACCGGCCTTCCAACCTTTGT
CTGCCTCTTTCTAAATTTACACAGTAGACCATTTGTCATCCATGGTGTCACAAATGGTTTTTTGTTTACAAT
TTATGGCAGATGTGTGTTACTTTTATTTGAATTTCTATATTTCCCATGTGGTTTTTATGTTTAATATTAGGGGAG
TAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTATCTTGGAGGTGGCCAATATGGGGATGTGGAATTTTTATA
CAAGTT

WO 2004/030615

PCT/US2003/028547

3316/6881
FIGURE 3058A

AACATTTTTGAAAGATCACTCAGCTTTAACACACCTTGGCTGGGTCTGGATAAAAAAAGTGAGCACTGCAAAAT
TTCTAGAAGAAAACATCAGGAGAAGAAAGAGAGAGGGGGATTTATTCAAAGTTGTTTCCAATTCTTTCAAAACCT
CAAACCAGGTGGCTATGGTATGGATGTAACCAAGAAAAACAAACGAGATGGAAGTCACTGAGAGAAATTGT
CACTGAAACAGTAACCACAAGACTTACATCCTTACCACCAAAAGGCGGGACCAGCAATGGCTATGCTAAAAACAGC
CTCTCTTGGTGGAGGGAGCCGGCTGGAGAAACAAAGCCTGACTCATGGCAGCAGCGGCTACATAAACTCAACTGG
AAGCACACGAGGCCATGCCTCCACCTCTAGTTACAGGAGGGCTCACTCACCTGCCTCCACTCTGCCCCAATCCCC
AGGCTCAACCTTTGAAAGGAAAACTCACGTTACCCGCCATGCGTATGAAGGGAGCTCCAGTGGCAACTCTTCTCC
GGAGTACCCTCGGAAGGAATTTGCATCTTCTTCAACCAGAGGACGGAGTCAAACACGAGAGAGTGAAATTCGAGT
TCGACTGCAGAGTGCCTCCCCATCCACCCGATGGACAGAATTGGATGATGTTAAGCGTTTGCTCAAGGGGAGTCG
ATCGGCAAGTGTGAGCCCCACCCGGAATTCCTCCAACACACTCCCCATCCCCAAGAAAGGCACTGTGGAGACCAA
AATTGTGACAGCGAGCTCCAGTGGTGTGAGGCACCTACGATGCAACGATCCTGGATGCCAACCTTCCCTCCCA
TGTGTGGTCTCCACCTGCCCCGCGGGTCTCCATGGGGACCTATCACAACAACATGACAACCCAGAGCTCATC
CCTCCTCAACACCAATGCCTACTCTGCGGGATCAGTCTTCGGAGTTCCAAACAACATGGCGTCTGCTACCCAC
TTTGACCCCTGGACTCAGCACATCCTCCTCAGTGTGTTGGCATGCAGAACATCTGGCCCCCAGCTTGACCACCCT
GTCCCATGGCACCACCACCTTCCACAGCATATGGGGTGAAGAAAAACATGCCCCAGAGTCTGCGGCTGTGAA
CACTGGCGTTTCCACCTCCGCGCCTGCACCACAAGTGTGAGAGCGATGACCTTTTGACAAAGGACTGCAAGTT
CCTGATCCTAGAGAAAGACAACACACCTGCCAAGAAGGAGATGGAGCTGCTCATCATGACCAAGGACAGCGGGAA
GGTCTTTACAGCCTCCCTGCCAGCATCGCTGCAACTTCTTTTTTCAGAAGACACCCTAAAAAAGAAAAAGCAAGC
TGCTACAATGCTGACTCAGGCCTAAAAGCCGAAGCTAATGGAGACCTGAAGACTGTGTCCACAAAGGGCAAGAC
CACCCTGCAGATATCCACAGCTACGGCAGCAGTGGTGGTGGTGGCAGTGGAGGAGGTGGCGGTGTTGGTGGCGC
TGGCGGCGGCCCTTGGGGACCAGCGCCAGCCTGGTGGCCCTGCGGCTCCTGCTGCAGCTGGTGAAGTGGCTGCT
GGGCTGCTGCTCAGCTGGCTGCTACTCCTGGGGCTGCTCTTCGGCCTCATTGCTCTGGCGGAGGAGGTGAGGAA
GCTGAAGGCGCGTGTGGATGAGCTGGAGAGGATCAGGAGGAGCATACTGCCCTATGGGGACAGCATGGATAGAAT
AGAAAAGGACCGCCTCCAGGGCATGGCACCCGCGGGGAGCAGACCTGGACAAAATTGGGCTGCACAGTGACAG
CCAGGAGGAGCTCTGGATGTTCTGTGAGGAAGAAGCTAATGATGGAACAGGAAAATGGAAATCTCCGAGGAAGCCC
TGGCCCTAAAGGTGACATGGGAAGTCCAGGCCCTAAAGGAGATCGAGGGTTCCCTGGGACTCCAGGTATCCCTGG
GCCCTTGGGCCACCCAGGTCCACAAGGACCAAAGGTTCAAAAAGGCAGCGTGGGAGATCCTGGCATGGAAGGCCC
CATGGGCCAGAGAGGGGCGAGAAGGCCCCATGGGACCTCGTGGTGAGGCAGGGCCTCCTGGATCTGGAGAGAAAGG
GGAAAGAGGGGCTGCTGGTGAACCAGGTCTCATGGCCACCTGGTGTCCAGGTTCTGTGGGTCCCAAAGGTTT
CAGCGGCTCTCCTGGGCCACAGGGCCCTCCAGGTCTGTAGGTCTCCAAGGGCTCCGAGGTGAAGTAGGACTTCC
TGGTGTCAAAGGTGACAAAGGACCAATGGGACCACCAGGACCCAAAGGTGACCAGGGTGAGAAAGGACCTCGAGG
CCTCACAGGCGAGCCTGGCATGAGAGGTTTGCCTGGTGTGTTGGTGTGAGCCCGGGGCTAAAGGAGCAATGGGTCC
TGCTGGCCAGACGGACACCAAGGCCCAAGAGGTGAACAAGGTCTTACTGGGATGCCGTGAATCCGTGGCCCCACC
AGGACCTTCTGGAGACCCAGGAAAGCCAGGTCTCACAGGACCCAGGGACCTCAGGGACTTCCCGGTACCCCTGG
CCGACCAGGAATAAAAGGTGAACCAGGAGCTCCAGGCAAGATCGTGAATTCGGAGGGGTATCGATGCTCACTGT
CCCAGGCCCCCAGGACCTCCTGGAGCCATGGGACCCCCAGGACCTCCAGGTGCCCCAGGCCCTGCCGGCCCCAGC
TGGTCTCCAGGACATCAAGAAGTTCTTAATTTACAAGTCCCCCAGGCCACCCGGCCCCACGCGGGCCACCAGG
GCCTTCCATTCCAGGCCACCAGGACCCGAGGCCACCAGGGGAGGGTTTGGCAGGCCACCAGGCCACCAGG
ATCGTTCTGTCCAACCTCAGAAACCTTCTCTCCGGCCCCCAGGCCACCTGGCCCCCAGGTCCCAAGGGAGA
CCAAGGTCCCCCAGGCCCCAGAGGACACCAAGGCGAGCAAGGCCCTCCAGGTTTCTCAACCTCAGGGTCCAGTTC
TTTCGGACTCAACCTTCAGGGACCACCAGGCCACCTGGCCCCCAGGGACCCAAAGGTGACAAAGGTGATCCAGG
TGTTCCAGGGGCTCTTGGCATTCCTAGTGGTCTTCTGAAGGGGGATCATCAAGTACCATGTACGTGTACAGGCC
GCCAGGGCCCCCTGGGCCCCCTGGGCTCCGGGCTCTATCAGCAGCTCTGGCCAGGAGATTCAGCAGTACATCTC
TGAGTACATGCAGAGTGACAGTATTAGATCTTACCTATCCGGAGTTTCAAGGTCCCCCAGGCCACCTGGTCCCCC
AGGACCTGTACACCACATCACAGGCGAGACTTTCGACTACTCAGAGCTGGCAAGCCACGTGTGTAGCTACTTACG
GACTTCGGGGTACGGTGTGAGCTTGTCTCTGCTCTCCATCTCTTCTGAAGACATTCTGGCTGTGCTGCAGCGGGA
TGACGTGCGTCAGTACCTACGTCACTTGTATGGGCCCTCGGGTCCGCCAGGGCCACCAGGAGCCAGTGGAGA
TGGGTCCCTCCTGTCTTTGGACTATGCAGAGCTGAGTAGTCGATCTCAGCTACATGTGAGTTCTGGGATCAG

WO 2004/030615

PCT/US2003/028547

3317/6881
FIGURE 3058B

CATTGGGCTTCCTGGTCCCCGGGGCCCCCTGGCTTGCCGGGAACCTCCTATGAGGAGCTCCTCTCCTTGCTGCG
AGGGTCTGAATTCAGAGGCATCGTTGGACCCCCAGGTCCCCCGGGTCCACCAGGGATCCCAGGCAATGTGTGGTC
CAGCATCAGCGTGGAGGACCTCTCGTCTTACTTACATACTGCCGGCTTGTCATTTCATCCCAGGCCCTCCAGGACC
TCCTGGTCCCCCAGGGCCTCGAGGGCCCCCGGGTGTCTCAGGAGCCCTGGCAACCTATGCAGCTGAAAAACAGCGA
CAGCTTCCGGAGCGAGCTGATCAGCTACCTCACAAGTCCTGATGTGCGCAGCTTCATTGTTGGCCCCCAGGCCC
TCCTGGGCCGAGGGACCCCCCTGGGGACAGCCGCCTCCTGTCCACGGATGCCTCCCACAGTCGGGGTAGCAGCTC
CTCCTCACACAGCTCATCTGTACAGCGGGGCAGCTCCTACAGCTCTTCCATGAGCACAGGAGGAGGTGGTGCAGG
CTCCCTGGGTGCAGGCGGTGCCTTTGGTGAAGCTGCAGGAGACAGGGGTCCCTATGGCACTGACATCGGCCCAGG
CGGAGGCTATGGGGCAGCAGCAGAAGGCGGCATGTATGCTGGCAATGGCGGACTATTGGGAGCTGACTTTGCTGG
AGATCTGGATTACAATGAGCTGGCTGTGAGGGTGTGAGAGCATGCAGCGTCAGGGCCTACTGCAAGGGATGGC
CTACACTGTCCAGGGCCCCACCAGGCCAGCCTGGGCCACAGGGGCCACCCGGCATCAGCAAGGTCTTCTCTGCCTA
CAGCAACGTGACTGCGGACCTCATGGACTTCTTCCAACTTATGGAGCCATTCAAGGACCCCCCTGGGCAAAAAGG
AGAGATGGGCACTCCAGGACCCAAAGGTGACAGGGGCCCTGCTGGGCCACCAGGTCATCCTGGGCCACCTGGCCC
TCGAGGACACAAGGGAGAAAAAGGAGACAAAGGTGACCAAGTCTATGCTGGGCGGAGAAGGAGAAGAAGTATTGC
TGTCAAGCCGTGAGCTAGCCATGGCAGGACAGCTCCTGGACCAGGTCTCATAATGCATGTGGCACTTAGGTCCAA
GGTCTCCAGAGGGTGAAAGCTGGAGTCTGTCAATGTCTACTGAGACAGCACAGCCAACCTAGCTAGCAACATTT
GTTTTAGTCTGAACAATATATACTTATAGAATTCAGTCAAAGATACACAATCTGAAACAGCTTCATGGGGTGGAC
TCTAACAGTAGTTGCAATGTTTTAGAATGAGACTTACTTCTCTGCTATCTAGATCTGAACTCCTTGCTTCTTTA
CTTAGTTCAAGCCCCAGCCTAGGAAAGCCAGTTACATAAAAGTTGGCTCAGGAGTCTTAGAGCTTTACCTAAATA
TGAGCCCAGAAAACGGAGGATGGGGGTGGGGCGCCTTCCTGGAGGTGACACTTGATGGGGGTGTGTTCTGGTTAC
TGTTCTAAGGCTGTGCCATCAGCTCCTTCCTCCCCTGTTTATTCTGCATTCTCTAGTCAGTTGGCTAAGAAGTGA
CTCTTGCAACTAAAAAATTAAGAAATTCACCTCCCCTCTAGGAGGTGATGATAGGGTTTCTAATGGTTATATGT
ATATCACATTCCCATTTTGCTTAGAAAGTCTGATTGTAGCTATGATTGTCCGTAGGCCCATCTAGAGTTCATGGA
TATGTTATACTGAACCAGGCCAGAGCAAAACAGAAAAAGAAGGTTGAGGGCAATGGACAAGGAAGGAATAAAGGGA
GAAGAGGGAAAACAGAAAACCTGATGCTGGGGACACAGCATCAGCTCAAGACGTACCCCTCCATTCTGCACTCAG
AAAATGGCACTTGGGGGACIGGGCGCAGTTGGTCTTTAACCACTTTTCAATGTCTAAAAACATTTGTTTGTGGTC
TATAAGATGAAACATCATTTCAATCGTAAAATTTCCATTAAAGAAGTTTTTTTTTCTAA

WO 2004/030615

PCT/US2003/028547

3318/6881
FIGURE 3059A

CTGGTCTCCGCGTGTGTGAGTACCGCGGCGCGAGGTTAGTGGTAGCTGGGTGCAGACGCCGTGGCGCTGGAGACC
CAAACATGGCAAACCTGGAAGAAAGCTTCCCCGAGGAGGTACAAGAAAGATCCACAAACCAGAGAAAGCTTTCC
AGCAGTCAGTTGAACAAGACAACCTATTTGATATTTCTACTGAAGAGGGATCCACCAAAGAAAAAGAGCCAGA
AGGGGCCAGCAAAAAACAAAAAGTTGAAAATCGAAAAGAGAGAAAGCAGCAAGTCCGCAAGAGAGAAGTTTGAAA
TCCTTAGTGTGTGAGTCCCTGTGTGAGGGAATGCGTATTTTGGGTTGCGTGAAAGAGGTGAATGAACTGGAAGTGG
TGATTAGTCTCCCCAATGGCCTCCAGGGCTTTGTGCAAGTCACTGAAATCTGTGATGCCTACACCAAAAAGCTGA
ATGAGCAGGTGACACAAGAACAACCTCTGAAGGACCTACTTCACTTGCCTGAACTTTTCTACCTGGAATGCTGG
TAAGATGTGTGGTGAGCAGTCTGGGCATCACAGACAGGGGCAAGAAGAGTGTCAAGCTGTCTCTGAACCCCAAAA
ATGTCAACAGAGTGCTGAGTGCTGAGGCCCTGAAGCCTGGCATGCTACTTACAGGTACCGTATCCAGCCTGGAAG
ACCATGGCTACCTAGTGGACATTGGTGTTGATGGGACCAGAGCTTTTCTGCCACTGCTGAAAGCCCAGGAGTACA
TCAGACAGAAGAACAAGGTGCTAAACTAAAGGTGGGTCACTACCTGAACTGCATTGTTGAAAAGGTGAAAGGCA
ACGGAGGAGTTGTTAGTCTGTCTGTGTTGGTCACTCAGAGGTTTCTACGGCCATTGCTACTGAACAGCAGAGCTGGA
ACCTTAATAACTTGCTACCAGGACTGGTGGTCAAAGCTCAGGTACAGAAGGTGACTCCATTTGGCCTTACGCTAA
ACTTCTCACATTCTTACGGGCGTGGTTGACTTTATGCACCTGGATCCCAAGAAAGCTGGAACATATTTCTCAA
ATCAGGCAGTGAGGGCCTGCATCCTTTGCGTCCATCTCGAACCAGAGTTGTGCACCTGAGCCTGCGCCCCATCT
TCCTACAGCCTGGACGCCCCACTCACCCGACTCTCTTGCCAGAACCTTGGAGCAGTGCTGGATGATGTTTCTGTCC
AGGGTTTTTTTCAAAAAGGCTGGGGCCACCTTTAGGCTGAAGGATGGGGTTCTGGCCTATGCCCGGCTCAGCCATC
TCTCTGATTCTAAGAACGTCTTCAATCCTGAGGCCTCAAGCCAGGGAACACTCACAAGTGTAGAATTATTGACT
ACAGCCAAATGGATGAACTGGCCTTGCTCTCTCTACGAACGTCTATTATTGAAGCTCAGTACCTTAGATATCATG
ACATCGAACCTGGGGCAGTGGTAAAGGGCACAGTGCTAACCATAAAGTCATATGGGATGCTGGTGAAGGTGGGCG
AGCAGATGAGGGGCTGGTACCTCCCATGCACCTGGCTGACATCCTGATGAAGAATCCGGAGAAGAAGTACCACA
TCGGGGATGAGGTCAAGTGCCGGGTTTTGCTTTGTGACCTGAAGCCAAGAAGCTGATGATGACCCTGAAAAAAA
CCCTGATTGAGTCCAACTACCTGTCATTACCTGCTATGCCGATGCCAAGCCTGGTCTGCAGACACATGGCTTCA
TCATCAGGGTCAAGGACTATGGCTGCATTGTGAAGTTCTACAACAATGTGCAGGGACTGGTGCCCAAGCATGAGC
TCAGTACTGAGTATATCCCTGACCCGGAGAGAGTTTTTTTACACTGGCCAGGTGGTGAAGGTTGTGCTATTGAACT
GTGAGCCATCCAAAGAGAGGATGCTCTTATCCTTCAAGCTGTCGAGTGATCCAGAGCCAAAGAAAGAGCCTGCAG
GACACAGTCAGAAGAAAGGAAAAGCCATTAACTTGGGCAGTTGGTAGATGTGAAGGTTTTAGAGAAGACCAAAG
ATGGGCTGGAGGTGGCTGTCTGCCCCACAACATCCGTGCTTTCTCCCCACATCTCATCTGTCGGACCACGTTG
CCAACGGCCCCATTGTTACATCATTGGCTCCAGGCAGGTGACATCCTTACCAGAGTCTGTGCTGAGCCAGAGCG
AGGGGCGTGTTCTTCTTTGAGGAAGCCAGCCTTGGTCTCCACAGTAGAAGGTGGCCAGGATCCCAAGAACTTCT
CAGAAATCCATCCTGGAATGCTGCTCATTGGTTTTGTGAAGAGCATCAAGGACTATGGCGTGTTTATCCAGTTCC
CCTCAGGTCTTAGCGGACTGGCCCCAAAAGCTATCATGAGTGACAAATTTGTGACCTCCACAAGTGACCACTTTG
TTGAGGGCCAGACAGTAGCGGCAAAGGTGACCAATGTGGATGAGGAGAAGCAGCGGATGCTGCTGCTACTGCGGC
TGTCGGACTGTGGTCTGGGGGACTTGGCTATCACCAGCCTCCTCCTCCTGAATCAGTGCCTGGAGGAGCTGCAGG
GCGTGCGCAGCCTTATGAGCAACCGAGACTCTGTGTTGATCCAGACGCTGGCCGAGATGACCCAGGAATGTTCC
TTGACCTAGTGGTGAGGAGGTGTTGGAAGATGGCTCTGTGGTATTAGTGGGGTCCAGTGCCCGACCTGGTCC
TGAAAGCCAGCAGATACCATCGCGCAGGGCAGGAGGTGGAATCTGGGCAGAAAAAGAGGTTGTTATCTTAAATG
TTGATCTTTTGAAGTTGGAAGTGACGTTTTCCCTTACCAGGACTTGGTGAATAGAAAAGCTAGAAAGCTGAGGA
AAGGCAGCGAACACCAGGCGATTGTGCAGCACTTGGAGAAGTCCTTTGCCATTGCCTCCTTGGTAGAGACGGGCC
ACCTGGCAGCTTTCTCCCTGACCTCTCACCTCAACGACACCTTCCGCTTTGACTCAGAGAAAATGCAGGTGGGAC
AGGGTGTCTCCCTAACCTCAAGACCACAGAACCAGGAGTGAAGTGGCCTTCTTTGGCTGTGGAGGGGCCGGCTG
CCAAGAGGACCATGAGGCCGACCCAGAAGGACTCTGAGACAGTTGATGAGGATGAAGAAGTGGATCCAGCTCTGA
CTGTAGGGACCATAAAGAAGCACACCTCTCCATCGGGGACATGGTCACAGGGACTGTCAAGTCCATTAAGCCTA
CCCATGTGGTTGTGACTCTGGAAGATGGCATTATTGGCTGTATCCATGCCTCCACATTCTAGATGATGTTCCAG
AGGGCACCTCTCCTACTACCAAGCTGAAGGTTGGGAAGACGGTCACTGCCGAGTGATTGGCGGGCGAGACATGA
AGACATTCAAGTATCTCCAATAAGTCACCCAGATTCTGTTGACCCCATGGAGAAGATTAAACAGTACCAGGCCG
AGCTGGAGGATGGCCACACTGCTCTTAACACTCACTCTGTTAGCCCATGGAGAAGATTAAACAGTACCAGGCCG
GCCAGACTGTTACTTGCTTCTTAAAGAAATACAATGTGGTGAAGAAATGGCTTGAGGTGGAGATTGCCCCAGACA

WO 2004/030615

PCT/US2003/028547

3319/6881
FIGURE 3059B

TCCGGGGGAGAATTCCCTTATTGCTCACTTCTCTGAGCTTCAAGGTTCTGAAGCATCCAGATAAGAAGTTCCGGG
TTGGCCAGGCCCTGAGGGCCACCGTTGTTGGCCCAGATTCCCTCCAAGACCCTCTTATGTCTGTCCCTCACAGGTC
CTCACAAGCTTGAGGAAGGGGAAGTGGCCATGGGCCGAGTGGTGAAGGTGACTCCCAACGAGGGGCTGACCGTCT
CCTTCCCTTTTGGGAAGATAGGAACAGTCAGTATATTTACATGAGTGACTCCTACTCCGAGACGCCCTTGAAG
ACTTCGTCCCCCAGAAGGTTTTTTCAGATGTTACATCCTGTCCACTGCAGACAACGTATTGACTTTGTCTGCTGCGAT
CATCCAGAACAAACCCGGAGACGAAAAGCAAAGTAGAAGATCCAGAGATTAAGTCCATCCAGGACATTAAGGAAG
GGCAGCTTCTGAGGGGCTATGTAGGGTCCATCCAGCCACACGGTGTGTTCTTTTCGCCTTGGCCCCCTCCGTTGTGG
GTTTGGCTCGGTACTCCCATGTCTCCAGCACAGCCCGTCCAAGAAAGCCCTTTATAACAAACACCTCCCTGAAG
GGAAGCTGCTCACAGCCAGGGTCTTACGCCTTAACCACCAGAAGAACCTGGTAGAGCTGTCTTTCTCCCGGAG
ACACTGGGAAGCCAGACGTGCTTTCTGCTTCCCTTGAAGGGCAACTTACAAAGCAAGAGGAGAGGAAAAACAGAGG
CTGAGGAGAGAGACCAAAAGGGGAAAAAGAAAATCAGAAAAGGAACGAGAAGAAGAACAGAAAGGGGCAGGAGG
AGGTGGAGATGCCAGCAAGGAGAAGCAACAGCCCCAGAAGCCACAGGCGCAGAAGCGGGGCGGGCGGGAGTGCC
GGGAGTCTGGGAGTGAGCAGGAAAGAGTGAGCAAGAAGCCAAAGAAAGCCGGCCTGTCTAGAGGAGGACGACAGCC
TTGTGGACGTGTACTATCGGGAGGGAAAAAGAGGAGGCAGAAGAGACGAATGTGCTGCCCAAGGAGAAGCAAAACCA
AGCCAGCAGAAGCGCCCCGGCTGCAGCTGTCTTCAGGCTTCGCTTGGAATGTGGGACTAGACTCTCTGACCCCGG
CCTTGCCACCTCTAGCAGAGAGCTCAGACAGCGAGGAGGATGAGAAGCCACACCAAGCCACGATAAAGAAAAGCA
AGAAAGAAAGGGAGTTGGAGAAGCAGAAGGCAGAGAAGGAACGTCCCGCATTGAGGAGGCGCTGATGGATCCTG
GGCGGCAGCCAGAGTCCGCGGATGATTTTGACCGACTGGTGTGAGCTCCCCAACAGCTCCATTCTGTGGCTGC
AGTACATGGCTTTCCACCTGCAGGCCACGGAGATCGAGAAGGCCCGTGCCGTGGCTGAGAGGGCCCTTAAGACCA
TCTCCTTCAGAGAGGAGCAGGAGAAGCTGAACGTGTGGGTGGCTCTGCTGAACCTGGAGAACATGTACGGCTCTC
AGGAGTCCCTGACCAAGGTCTTTGAGCGAGCCGTGCAGTACAACGAGCCTCTCAAAGTCTTTCTCCACCTGGCTG
ACATCTACGCCAAGTCAGAGAAATTCCAGGAAGCTGGTGAACCTCTACAACCGGATGCTGAAGCGTTTCCGGCAGG
AGAAAGCTGTGTGGATCAAATACGGCGCCTTCTTCTGCGGAGGAGCCAGGCTGCAGCCAGTCACCGCGTGTCTGC
AGCGAGCCCTGGAGTGCTGCCTAGCAAGGAGCATGTGGATGTCTATTGCCAAGTTTGCCAGCTTGAGTTTCAGC
TGGGGGATGCAGAGCGGGCCAAAGCCATTTTTGAGAACACGCTGAGCACCTACCCAAAGCGCACAGATGTCTGGT
CGGTCTATATCGACATGACCATCAAGCACGGCAGCCAGAAGGACGTCCGGGACATCTTTGAGCGGGTCATTCATC
TGAGCTTGGCCCCCAAGAGAATGAAGTTCTTCTTCAAGCGCTACCTGGACTACGAGAAGCAGCATGGCACTGAGA
AGGATGTGCAGGCAGTCAAGGCCAAGGCCCTGGAGTATGTGGAGGCCAAGAGCTCAGTGCTAGAGGACTAGTGGC
AGGCTGGCTCTGTGGGACACTGTCAACAATGGGCCAGCCCGGCCCGCCTCGAGTGCCTGGGCACTCGGAAAAC
GTTACCTCAGGACTCTATTTAAATGCTGCTTTTTCTGCAGCACGCTTGGGGAAATCCTGTCTAGGATGAAAAGGAA
GTTGAGATTTTTTAAATCCCTCTTCGCTTGCTTTATTTTTCAGTACCAACTTGTTATCTTTTCTTATCTGAGGC
TACCTGGGGATTGTGGGCAGCAGGCCCTGGACTCCAGAAATGCTGAGGGTCCCTCTTCCAGGGGAGTTCCCTG
GGGAGCAAGAGTAGAGGGGCTATTCCCGAGGGTCTGTGGTTCAGGGTCCCTGCTTTGTCCCTGGCAGGCTGTCTAGT
CCAGCTGGAGGGGGTCTAGTAGGCTCCAGGGAGTGGGCCCTCCCTCCGATCTTGGAGTCTCTGGGTGTTCTTCA
GCCTCAGCCTCACTGGTACCTTCTGCCCTTTAGGGGAGGCTATGAGTCTGGGACAGGAGGACAAATTCAGAGCCC
AGAGGGGGAATGGAGAAACCTGGGCTGCTGAGGAAAGCCACGGGTGTTGGCGTGAACCTGATGATGTCTCATCCC
ACGCCCCTATGGCCACATTACCTAACCTCTCCATATCTGGGCTATTCAAGGTCTTGAGGGCCAGCACAGACCCA
GCTAGTTGTTGAAGCCAGTTCTTTTTTGTCTTGGTCAATGAGGGAATTAAACGTTTTCTCTGGCAG

WO 2004/030615

PCT/US2003/028547

3320/6881
FIGURE 3060

MANLEESFPRGGTRKIHKPEKAFQOSVEQDNLFDISTEEGSTKRKKSQKGPATKTKLKIEKRESSKSAREKFEIL
SVESLCEGMRI LGCVKEVNELELVISLPNGLQGFVQVTEICDAYTKKLEQVTQEQLKDLLHLPELFS PGMLVR
CVVSSLGITDRGKKS VKLSLNPKNVNRVLSAEALKP GMLLTGTVSSLEDHG YLVDIGVDGTRAF LPL LKAQEYIR
QKNKGAKLKV GQYLNCIVEKVKGNGGVVSVL SVGHSEVSTAIATEQQSWNLNNLLPGLVVK AQVQKVTPFGLTLNF
LTFFTGVVDFMHLDPKKAGTYFSNQAVRACILCVHPRTRVVHLSLRP IF LQPGRP LTRLSCQNLGAVLDDVPVQG
FFKKAGATFRLKDGVLAYARLSHLSDSKNVFNPEAFKPGNTHKCRIIDYSQMDLALLSLRTSII EAQYLR YHDI
EPGAVVKGTVLTIKSYGMLVKVGEQMRGLVPPMHLADI LMKNEPKKYHIGDEVKCRVLLCDPEAKKLMMTLKKT L
IESKLPVITCYADAKPGLQTHGFIIRVKDYGCIVKFYNNVQGLVPKHELSTEYIPDPERV FYTGQVVKVVVNCE
PSKERMLS FKLSSDPEPKKEPAGHSQKKGKAINIGQLVDVKVLEKTKDGLVAVLPHNIRAF LPTSHLS DHVAN
GPLLHHWLQAGDILHRVLCLSQSEGRVLLCRKPALVSTVEGGQDPKNFSEIHPGMLLIGFVKSIKDYGVFIQFPS
GLSGLAPKAIMSDKFVTSTSDHFVEGQTVAAKVTNVDEEKQRM LLSLRLSDCGLGDLAITS LLLL NQCLEELQGV
RSLMSNRDŠVLIQT LAEMTPGMFLDLVVQEVLEDGSVVFSGGPVPDLVLKASRYHRAGQEVESGQKKKVILNVD
LLKLEVHVS LHQDLVNRKARKLRKGSEHQAI VQHLEKSFAIASLVETGHLAAFS L TSHLNDTFRFDSEKLQVGQG
VSLTLKTTEPGVTGLLLAVEGPAAKRTMRPTQK DSETVDEDEEVDPALTVGTIKKHTLSIGDMVTGTVKSIKPTH
VVVTLEDGII GCIHASHILDDVPEGTSPTTKLVGKTVTARVIGGRDMKTFKYLPI SHPRFVRTIPELSVRPSEL
EDGHTALNTHSVSPMEKIKQYQAGQTVTCFLKKYNVVKWLEVEIAPDIRGRIP LLLTSLSFVKLKHDPKKFRVG
QALRATVVGPDSSKTLCLSLTGPHKLEEGEVAMGRVVKVTPNEGLTVSFPFGKIGTVSIFHMSDSYSETPLEDF
VPQKVFRCYILSTADNVLTLSLRSSRTNPETKSKVEDPEINSIQDIKEGQLLRGYVGSIQPHGVFFRLGPSVVGL
ARYSHVSQHSPSKKALYNKHLPEGKLLTARVLRNLHQKNLVELSFLPGDTGKPDVLSASLEGQLTKQEERKTEAE
ERDQKGEKKNQKRNEKKNQKGQEEVEMP SKEKQPPQKPQAQKRGGRECRESGSEQERVSKPKKAGLSEEDDSL V
DVYYREGKEEAEETNVL PKEKQTKPAEAPRLQLSSGFAWNVGLDSLTPALPPLAESSDSEDEKPHQATIKKSKK
ERELEKQKA EKELSRIEEALMDPGRQPESADDFDRLVLSSPNSSILWLQYMAFHLQATEIEKARAVAERALKTIS
FREEQEKLVVWALLNLENMYGSQESLTKVFERAVQYNEPLKVFLHLADIYAKSEKFEAGELYNRMLKRFRQEK
AVWIKYGAFLLRRSQAASHRVLQRALECLPSKEHVDVIAKFAQLEFQLGDAERAKAIFENTLSTYPKRTDVWSV
YIDMTIKHGSQKDVRDIFERVIHLSLAPKRMKFFFKRYLDYEQHGTEKDVQAVKAKALEYVEAKSSVLED

WO 2004/030615

PCT/US2003/028547

3321/6881
FIGURE 3061

CCGAGAGGTGGTTACATTTCGTTGAAGGACACCAGCTGCGGAATTTGCGGCTTTGGCAGACCCAGCTGAGTCACTG
TCACTGCCTACCAATCTCGACCGGACCTCGACCGGCTCGTCTGTGCTGCCAATCGACTCGGCGTGGCGTCGGTCG
TGGTAGATAGGCGGTCATGCATACGAATTTTCAGCTCTTGTTCTGGTGACCTTTTGAATACGTCTTGTCTATAAA
AGAAATTCATGCCTTTGTAAAATACACAGATTGAAATCATGGCGAGGTCCAGAAAGTGATGCGCAATACCAGTTCA
CTGGTATTAAAAAATATTTCAACTCTTATACTCTCACAGGTAGAATGAACTGTGTACTGGCCACATATGGAAGCA
TTGCATTGATTGTCTTATATTTCAAGTTAAGGTCCAAAAAACTCCAGCTGTGAAAGCAACATAAATGGATTTTA
AACTGTCTACGGTTCTTAACCTCATCTGTTAAGTTCCCATGCCTGGAGAAGCTAATGCCAACTCATCATGTGATA
ATTCAATTTGTACAATAAATTATGAACCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3322/6881
FIGURE 3062

MAGPESDAQYQFTGIKKYFNSYTLTG RMNCVLATYGSIALIVLYFKLRSKKT PAVKAT

WO 2004/030615

PCT/US2003/028547

3323/6881
FIGURE 3063

CGGCATGTGGAAGAAGGTGAAGATGCGCGGTGGCCAGGGCCGGGGTCTTGGGAGTCCAGTGGCTGCAAAGGGCATC
CCGGAACGTGATGCCGCTGGGCGCACGGACAGCCTCCCACATGACCAAGGACATGTTCCCGGGGCCCTATCCTAG
GACCCAGAGAAGAACGGGCCGCCGCCAAGAAGTATAATATGCGTGTGGAAGACTACGAACCTTACCCGGATGA
TGGCATGGGGTATGGCGACTACCCGAAGCTCCCTGACCGCTCACAGCATGAGAGAGATCCATGGTATAGCTGGGA
CCAGCCGGGCCTGAGGTTGAACTGGGGTGAACCGATGCACTGGCACCTAGACATGTACAACAGGAACCGTGTGGA
TACATCCCCCACACCTGTTTCTTGGCATGTCATGTGTATGCAGCTCTTCGGTTTCCTGGCTTTCATGATATTCAT
GTGCTGGGTGGGGGACGTGTACCCTGTCTACCAGCCTGTGGGACCAAAGCAGTATCCTTACAATAATCTGTACCT
GGAACGAGGCGGTGATCCCTCCAAAGAACCAGAGCGGGTGGTTCACTATGAGATCTGAGGAGGCTTCGTGGGCTT
TTGGGTCTCTAACTAGGACTCCCTCATTCTAGAAATTTAACCTTAATGAAATCCCTAATAAAACTCAGTGCTG
TGTTAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3324/6881
FIGURE 3064

MAVARAGVLGVQWLQRASRNVMLGARTASHMTKDMFPGPYPRTPEERAAAAKKYNMRVEDYEPYPDDGMGYGDY
PKLPDRSQHERDPWYSWDQPGLRLNWGEPMHWHLDMYNRNRVDTSPVPSWHVMCMQLFGFLAFMIFMCWVGDVY
PVYQPVGPKQYPYNNLYLERGGDPSKEPERVVHYEI

WO 2004/030615

PCT/US2003/028547

3325/6881
FIGURE 3065

ACGGTCACCCGTTGCCAGCTCTAGCCTTTAAATTCCTGGGCTCGGGGACCTCCACGCACCGCGGCTAGCGCCGACA
ACCAGCTAGCGTGCAAGGCGCCGCGGCTCAGCGCGTACCGGCGGGCTTCGAAACCGCAGTCCTCCGGCGACCCCG
AACTCCGCTCCGGAGCCTCAGCCCCCTGGAAGTGATCCCGGCATCCGAGAGCCAAGATGCCGGCCCACTTGCTG
CAGGACGATATCTCTAGCTCCTATACCACCACCACCATTACAGCGCTCCCTCCAGGGTCTGCGAGAATGGA
GGAGATAAGTTGGAGACGATGCCCCCTCTACTTGGAAGACGACATTCGCCCTGATATAAAAGATGATATATATGAC
CCCACCTACAAGGATAAGGAAGGCCCAAGCCCCAAGGTTGAATATGTCTGGAGAAACATCATCCTTATGTCTCTG
CTACACTTGGGAGCCCTGTATGGGATCACTTTGATTCTACCTGCAAGTTCTACACCTGGCTTTGGGGGGTATTC
TACTATTTTGTGAGTGGCTGGGCATAACAGCAGGAGCTCATCGTCTGTGGAGCCACCGCTCTTACAAAGCTCGG
CTGCCCCCTACGGCTCTTTCTGATCATTGCCAACACAATGGCATTCCAGAATGATGTCTATGAATGGGCTCGTGAC
CACCGTGCCCAACACAAGTTTTCAGAAACACATGCTGATCCTCATAATTCCCGACGTGGCTTTTTCTTCTCTCAC
GTGGGTTGGCTGCTTGTGCGCAACACCCAGCTGTCAAAGAGAAGGGGAGTACGCTAGACTTGTCTGACCTAGAA
GCTGAGAAACTGGTGATGTTCCAGAGGAGGTACTACAAACCTGGCTTGCTGATGATGTGCTTCATCCTGCCACG
CTTGCGCCCTGGTATTTCTGGGGTGAACTTTTCAAACAGTGTGTTCTGTTGCCACTTTCTTGCGATATGCTGTG
GTGCTTAATGCCACCTGGCTGGTGAACAGTGTGCCACCTCTTCGGATATCGTCCTTATGACAAGAACATTAGC
CCCCGGGAGAATATCCTGGTTTCACTTGGAGCTGTGGGTGAGGGCTTCCACAACCTACCACCACTCCTTTCCCTAT
GACTACTCTGCCAGTGAGTACCGCTGGCACATCACTTCACCACATTCTTCATTGATTGCATGGCCGCCCTCGGT
CTGGCCTATGACCGGAAGAAAGTCTCCAAGGCCGCCATCTTGCCAGGATTAAGAAGAACCGGAGATGGAAACTAC
AAGAGTGGCTGAGTTTGGGGTCCCTCAGGTTCCTTTTTCAAACACAGCCAGGCAGAGGTTTTAATGTCTGTTTA
TTAACTACTGAATAATGCTACCAGGATGCTAAAGATGATGATGTTAACCATTCCAGTACAGTATTCTTTTAAAA
TTCAAAGTATTGAAAGCC

WO 2004/030615

PCT/US2003/028547

3326/6881
FIGURE 3066

TCTCTTGATTCTAGTCTCTCGATATGGCACCTCCGTCAGTCTTTGCCGAGGTTCCGCAGGCCAGCCTGTCCTG
GTCTTCAAGCTCACTGCCGACTTCAGGGAGGATCCGGACCCCGCAAGGTCAACCTGGGAGTGGGAGCATATCGC
ACGGATGACTGCCATCCCTGGGTTTTGCCAGTAGTGAAGAAAGTGGAGCAGAAGATTGCTAATGACAATAGCCTA
AATCAGGATATCTGCCAATCCTGGGCCTGGCTGAGTTCCGGAGCTGTGCTTCTCGTCTTGCCCTTGGGGATGAC
AGCCCAGCACTCAAGGAGAAGCGGGTAGGAGGTGTGCAATCTTTGGGGGGAACAGGTGCACTTCGAATTGGAGCT
GATTTCTTAGCGCGTTGGTACAATGGAACAAACAAGAACACACCTGTCTATGTGTCCTACCAACCTGGGAG
AATCACAATGCTGTGTTTTCCGCTGCTGGTTTTAAAGACATTCCGTCCTATCGCTACTGGGATGCAGAGAAGAGA
GGATTGGACCTCCAGGGCTTCCTGAATGATCTGGAGAATGCTCCTGAGTTCTCCATTGTTGTCCTCCACGCCCTGT
GCACACAACCCAACTGGGATTGACCCAACTCCGGAGCAGTGGAAAGCAGATTGCTTCTGTCTATGAAGCACCCTGTT
CTGTTCCCTTCTTTGACTCAGCCTATCAGGGCTTCGCATCTGGAAACCTGGAGAGAGATGCCTGGGCCATTTCGC
TATTTTGTGTCTGAAGGCTTCGAGTTCTTCTGTGCCAGTCTTCTCCAAGAACTTCGGGCTCTACAATGAGAGA
GTCGGGAATCTGACTGTGGTTGGAAAAGAACCTGAGAGCATCTGCAAGTCCTTTCCAGATGGAGAAGATCGTG
CGGATTACTTGGTCCAATCCCCCGCCAGGGAGCACGAATTGTGGCCAGCACCTCTCTAACCCTGAGCTCTTT
GAGGAATGGACAGGTAATGTGAAGACAATGGCTGACCGGATTCTGACCATGAGATCTGAACCTCAGGGCACGACTA
GAAGCCCTCAAAAACCCCTGGGACCTGGAACACATCACTGATCAAATTGGCATGTTTCACTTCACTGGGTTGAAC
CCCAAGCAGGTTGAGTATCTGGTCAATGAAAAGCACATCTACCTGCTGCCAAGTGGTCAATCAACGTGAGTGGC
TTAACCACCAAAAATCTAGATTACGTGGCCACCTCCATCCATGAAGCAGTCACCAAAATCCAGTGAAGAAACACC
ACCCGTCCAGTACCACCAAAGTAGTTCTCTGTCTATGTGTGTTCCCTGCCTGCACAAACCTACATGTACATACCAT
GGATTAGAGACACTTGCAGGACTGAAAGCTGCTCTGGTGAGGCAGCCTCTGTTTTAAACCGGCCCCACATGAAGAG
AACATCCCTTGAGACGAATTTGGAGACTGGGATTAGAGCCTTTGGAGGTCAAAGCAAATTAAGATTTTTATTTAA
GAATAAAGAGTACTTTGATCATGAGACATAGGTATCTTGTCCCTCTCACTAAAAAGGAGTGTTGTGTGTGGCGG
CCACGTGCTTCTATGTGGTGTGTTGACTCTGTACAAATTCTAGTCCCAAAGATCAAGTTGTCTGAAGGAGCCAAAG
TGTGAATGTGGGTGTGGCTGCGGCATTAAATTCATCATCTCAACCCAGAGTGTCTGGTCTCCCTGCTCTTTCTG
CATGGTTGTGTCCCTAGTCCTAAGCTTTGGTTCTTTAGGGTGACTGTGGTAAGAAGGATATTTAATCATGACATG
CACGGACACGTACATATTTAACTGAAACAAGTTTTACCAACAGTATTTACTCGTGATGTGCGTAGTGCAATTCTG
ATATTTTTGAGCCATTCTATTGTGTTCTACTTCACCTAAAAAATAAAATAAAATGTTGATCAAG

WO 2004/030615

PCT/US2003/028547

3327/6881
FIGURE 3067

MAPPSVFAEVPQAQPVLVFKLTADFREDPDPRKVN LGVGAYRTDDCHPWLPVVKKVEQKIANDNSLNHEYLPIL
GLAEFRSCASRLALGDDSPALKEKRVGGVQSLGGTGALRIGADFLARWYNGTNNKNTPVYVSSPTWENHNAVFS
AGFKDIRSYRYWDAEKRGDLQGF LNDLENAPEFSIVVLHACAHNPTGIDPTPEQWKQIASVMKHRFLFPFFDSA
YQGFASGNLERDAWAI RYFVSEGFEFFCAQSFSKNFGLYNERVGNLTVVGKEPESILQVLSQMEKIVRITWSNPP
AQGARIVASTLSNPELFEWTGNVKTMA DRILTM RSELRARLEALKTPGTWNHITDQIGMFSFTGLNPKQVEYLV
NEKHIYLLPSGRINVSGLT TKNLDYVATSIHEAVTKIQ

WO 2004/030615

PCT/US2003/028547

3328/6881
FIGURE 3068A

GGCTGGGGGGCGCGGGCGGGAGGCGGATAAAAAGGCCCCAGGGCGCCCGGGAGGGAGCCCGTTAGCGCTGCTC
CGCCGCGGGCGCCCGCCAGCCCGGACTGTCCGCGCTCCATCTGGTATCTTGGCCTCAGCTGTCTTGAAGTCAC
CATGGCGAGGTCCCCACCAGCCACCCTCTTTCTGTTCTGCTGCTGCTAGGCCAGCCCCCTCCAGCAGGGCCACA
GTCACTGGGCACCACTAAGCTCCGGCTGGTGGGCCAGAGAGCAAGCCAGAGGAGGGCCGCTGGAGGTGCTGCA
CCAGGGCCAGTGGGGCACCGTGTGTGATGACAACCTTTGCTATCCAGGAGGCCACAGTGGCTTGCCGCCAGCTGGG
CTTCGAAGCTGCCTTGACCTGGGCCACAGTGCCAAGTACGGCCAAGGGGAGGGACCCATCTGGCTGGACAATGT
GCAGTGTGTGGGCACAGAGAGCTCCTTGACCAGTGCGGGTCTAATGGCTGGGGAGTCAGTGAAGTCACTGCTC
AGAAGACGTAGGGGTGATATGCCACCCCGCGCCATCGTGGCTACCTTTCTGAAACTGTCTCCAATGCCCTTGG
GCCCCAGGGCCGGCGGCTGGAGGAGGTGCGGCTCAAGCCCATCCTTGCCAGTGCCAAGCAGCATAGCCCAGTGAC
CGAGGGAGCCGTGGAGGTGAAGTATGAGGGCCACTGGCGGCAGGTGTGTGACCAGGGCTGGACCATGAACAACAG
CAGGGTGGTGTGCGGGATGCTGGGCTTCCCCAGCGAGGTGCCGTGTCGACAGCCACTACTACAGGAAAGTCTGGGA
TCTGAAGATGAGGGACCCTAAGTCTAGGCTGAAGAGCCTGACGAATAAGAACTCCTTCTGGATCCACCAGGTCAC
CTGCCTGGGGACAGAGCCCCACATGGCCAAGTGCAGGTGCAGGTGGCTCCAGCCCGGGGCAAGCTGCGGCCAGC
CTGCCCAGGTGGCATGCATGCTGTGGTCAGCTGTGTGGCAGGGCCCTCACTTCCGCCACCGAAGACAAAGCCACA
ACGCAAAGGGTCTTGGGCAGAGGAGCCGAGGGTGCCTGCGCTCCGGGGCCAGGTGGGCGAGGGCCGGGTGGA
AGTGCTCATGAACCGCCAGTGGGGCACGGTCTGTGACCACAGGTGGAACCTCATCTCTGCCAGTGTCTGTGTCTG
TCAGCTGGGCTTTGGCTCTGCTCGGGAGGCCCTCTTTGGGGCCCGGTGGGCCAAGGGCTAGGGCCCCATCCACCT
GAGTGAGGTGCGCTGCAGGGGATATGAGCGGACCCTCAGCGACTGCCCTGCCCTGGAAGGGTCCCAGAATGGTTG
CCAACATGAGAATGCTGCTGCTGTGAGGTGCAATGTCCCTAACATGGGCTTTCAGAATCAGGTGCGCTTGGCTGG
TGGGCGTATCCCTGAGGAGGGGCTATTGGAGGTGCAGGTGGAGGTGAACGGGGTCCCACGCTGGGGGAGCGTGTG
CAGTGAAGAACTGGGGGCTCACCGAAGCCATGGTGGCCTGCCGACAGCTCGGCTGGGTTTGGCCATCCATGCCTA
CAAGGAAACCTGGTTCTGGTGGGGACGCCAAGGGCCCAGGAGGTGGTGTAGTGGGGTGCCTGCTCAGGCAC
AGAGCTGGCCCTGCAGCAGTGCCAGAGGCACGGGGCCGGTGCCTGCTCCACGGTGGCGGGCGCTTCCCTGGCTGG
AGTCTCCTGCATGGACAGTGCACCAGACCTGGTGTATGAACGCCAGCTAGTGCAGGAGACGGCCCTACTTGGAGGA
CCGCCCCGCTCAGCCAGCTGTATTGTGCCACAGAGGAGAACTGCCCTCTCCAAGTCTGCGGATCACATGGACTGGCC
CTACGGATACCGCCGCCTATTGCGCTTCTCCACACAGATCTACAATCTGGGCGCGGACTGACTTTTCGTCCAAAGAC
TGGACGCGATAGCTGGGTTTGGCACCAGTGCCACAGGCATTACCACAGCATTGAGGTCTTCACCCACTACGACCT
CCTCACTCTCAATGGCTCCAAGGTGGCTGAGGGGCACAAGGCCAGCTTCTGTCTGGAGGACACAACTGCCCCAC
AGGACTGCAGCGCGCTACGCATGTGCCAAGCTTTGGAGAACAGGGAGTGACTGTAGGCTGCTGGGACACCTACCG
GCATGACATTGATTGCCAGTGGGTGGATATCACAGATGTGGGCCCCGGGAATTATATCTTCAGGTGATTGTGAA
CCCCCACTATGAAGTGGCAGAGTCAGATTTCTCCAACAATATGCTGCAGTGCCGCTGCAAGTATGATGGGCACCG
GGTCTGGCTGCACAACTGCCACACAGGGAATTCATACCCAGCCAATGCAGAACTCTCCCTGGAGCAGGAACAGCG
TCTCAGGAACAACCTCATCT**TGA**AGCTGTCACTGCACACTCCTAGCTGCTGCCGATACACCAGATACCTCAGCTTA
TTGGAGCCATGCCCTTCACAGAGTCCCAACTCAGAGGAAAAGGGCCAGTGCCAAGGGGCACCAAGAACCTGCTCA
GGAAGCCTTTTGATGGCAAGATCACCAATCCAGATGGTATTGCTCCCTCAGGATGGCTCTGGGCTGCCCTAAG
GGCCTGTGGCCTATGGAATATGTCTCCAGGCTTTGCTCAGCTGAGCTCCTCTCTGTAAAGGAAACCCAGTCATC
CCTGAATCTTGCCACAGAGATCCGGGATTAGGAGCTCTCAGTTTCTTAGGGATGGACTATGGCCAGTCCCCCA
TCTAAGTGGTGCTTTGCAAATGTCTTGGAGGAGTATAGGACAGAGGACCAAAATACACAGCAGGTAGTGTAGCT
CTCTGCTAGGAGCTCAAAGCAACACAACCTTGATCAAAATCACAAGTGGCAGAGAAGCTGGTGGATCCAATCCTT
TCTTCATCTGTTGTTATTTAGAACTCACCTCTCACACTCTGTTCTTTAGTGTCTTACCTTTATCTTACCACACA
CATGGGTGTTTTCTATTATCCTTGGAGCAGAGCTCGGGCATCCCTTATTGCCTGATGGGCCAACACCAACAG
TTACGGAGTGTCTGAGAAGGGGCAAGTTTTCAGAGAAATGGCCAGATAGGGCCTTCTACAGAGCAGCAAGAGTAG
GCCAAGCAGAAAGACTGCTGAGGTAACACGGACCCAGCCCCGTGTCAGGGCCTCTGCCAAGGAAATAATATGGAC
CATTTACCTGGCAGGCAGTCTGCTCTCTCAGGATACCCAGCATCTCAGGATTGGTCTAAACTTCAAGTCTCA
ACCAAGTGTCTGAAGTGAACCTTTGCATTGAATAAATTTTGCCATGGAAAGAACATCAAAACAGCCACTCATCTC
TACAGAGATAAGAAAACAAGTTTGGCAGAGCAAGAGACAGAAGACCGTGGAGAAATCAGAAGGGGGAACAGTCAG
TTTAGTTAAGGATGGAACCTGGGAAAGGCCACCATTCTGCTTGATGGGGCTCTGATTGTCTTGTCTAAGTGG
AATAAAACCCCATGGTCTTCTTGACATGATTCTTGATCTTTTCTCCACTGAGACACACTTAAGTGATGATCCTTA

WO 2004/030615

PCT/US2003/028547

3329/6881
FIGURE 3068B

CAGGACTGACACCCTAATGCCAATAAAAGTTGCTCATTATGGACTGCTACAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3330/6881
FIGURE 3069

MARSPPATLFLFLLLLGQPPPSRPQSLGTTKLRLVGPESEKPEEGRLEVLHQGWGTVCDDNFATVACRQLG
FEAALTWAHSAKYQGEGPIWLDNVQCVGTESLDQCGSNGWGVSDCSHSEDVGVICHPRRHRGYLSETVSNALG
PQGRRLLEEVRLLKPILASAKQHSPVTEGAVEVKYEGHWRQVCDQGWMTMNSRVVCGMLGFPSEVPVDSHYRKYVD
LKMRDPKSRLKSLTNKNSFWIHQVTCLGTEPHMANCQVQVAPARGKLRPACPGGMHAVVSCVAGPHFRPPKTKPQ
RKGSWAEPRVRLRSGAQVGEGRVEVLMNRQWGTVCDDRWNLISASVVCRLGFGSAREALFGARLGQGLGPIHL
SEVRCRGYERTLSDCPALEGSQNGCQHENAANVRCNVPNMGFQVRLAGGRIPEEGLLEVQVEVNGVPRWGSVC
SENWGLTEAMVACRQLGLGFAIHAYKETWFWSGTPRAQEVMSGVRCSGTELALQQCQRHGPVHCSHGGRFLAG
VSCMD SAPDLVMNAQLVQETAYLEDRLPSQLYCAHEENCLSKSADHMDWPYGYRRLRLRFSTQIYNLGRITDFRPKT
GRDSWVWHQCHRYHSIEVFTHYDLLTLNGSKVAEGHKASFCLDTNCPTGLQRRYACANFGEQGVTVGCWDTYR
HDIDCQWVDITDVGPNGYIFQVIVNPHYEVAESDFSNNMLQCRCKYDGHVWLNCHTGNSTYPANAELSLEQEQR
LRNNLI

WO 2004/030615

PCT/US2003/028547

3331/6881
FIGURE 3070

GAAAGGAGGAGAGGAAGAGAGGACTAAGAGGGGAGCAAGGCGAGGAGGCCGCGGGCGGGCGCAGCGGGCACCTGGG
CCGTGCTGCCCCCGCAGCAAGGCGCGGCCATTCCGCTGCTCGGGGCGCCGCCGCCGCCGCCACCAGCGCCAGGG
GCCATGCTCCCGCGCCCCCGCGCCAGCCGCCGCCAGGCGCGTGCGGCCCGCGGCGGGTGCAGCTGCAGCGG
CCCTTCCTGCGCAGCCCGCTGGGCGTGTTCGCGCTGCTGCAGCTGCTGGCCGGCGCTGCCTTCTGGATCACTATC
GCCACCAGCAAGTACCAGGGCCCCGCTGCACTTCGCGCTCTTCGTGTCCGTGCTCTTCTGGTGCTCACCTTGGGC
CTCTACTTCCTCAGCTGCTGGGCAAGCAGAGCTGGTCCCCGTGCTGGGCTCGCGCTGGCTCATGGTCAACGTG
GCGCAGCATGTGCTGGCGGCCGCGCTCTACGGCGCCGCCACCAGGATCATGAGCGACCAGATGCAGCGCCACAGC
TACTGCAACCTCAAGGATTACCCGCTCCCTGCGCTACACGCCCTTCTGGCGGCCGCCGCTGCGGGCGGCGTC
TGCCACGGCCTCTACCTGCTTTTCGCGCTCTATGGCTGCGGGCGTGCCTGCCAGGGCAAGCAGGAGGTGGCGTGA

GGCCGCGCGCGCCCCGCGCGGCCCGATCGGGGCGGGGAATCCCCGAGACCAGCCTCCTTAATCCTTCCCC
GCCGCGCGCCCCGCGCGGGTGCGCCCTGGCACCTCTCCCTGCCCTCCAGCGTTTCCACTGTCGCCCGCGCCGGG
AACCTGACGCTCAGCTCCCGCCCCGACGGCAGCGCGCGCGCGCCAGAAATCCAGCCAGAAATCCGACCGCG
CGCCGGACGCGCGCTCTCCCGGGACAAGCGCAGGCTGCGATCCGAGGGGCTGACACACTCGCAGACGAGCCGC
CCCGAGGCGAAACCTCGCGGTTCTCTTCCCTTCCCTGCTGAGACTAAGACGTGGACAGGGGCCGCGCAGATCCG
GGGGAGGCTCCCAAATTGGAACCAGGCTTCTGGCTGCCCCCTTCCCTCCCGCCCCGTGGTCCGAAGAGCACTCC
TTCCCTGGCCCCCTCATCCAGCCTCCGGTGTGTAAACGCAGGCGCTGGGCCGCGGGCGGAGCTGAGGACAGGCC
TTGGCTGGTCCCAGGATGAGCGACGAGTTTGGTTTTAGCTGGGGATTGTGCTGGCATCCTGCGAAGCTCCTCCCA
GCCGGTCTCTCTGTGCTCGGTTGTCTTGGGGTGGGGCCATCCGCCAGGTGGGGACCGATAGGAGAAGCCGGTG
GGTTGTACCCTTACACTTGTGGAGTCTCCTCTTGCCTCTACCTACTCCGCCTTGTCTTAAGTTTTTGCAGGC
CAGTGCCAAACACACACTAAGTGTCTGGCCTCTCCGTGACACAAGTCTCTTCCAGCCTTCTCACAGGCTTCT
GCCGCCCCCTCATCTCCACCCTCCCCATATCTGTTTGCATTAGGAGTTCCACGACCATGGTGAATGTTAAGG
TGAACCCACCCCTTCTTACAGATGGGGACCCAGAGCCTGCTCTTGGGAACAGCCAGAGTAAGATTGGAACCCAG
ACTTGCACTCCAGCGCTGTTTGCATTAAAGGGTGGGTGAGTCAGGACCCCTGGCTCAGGAGCCGCTCTCCTAA
AAGAGGGTTTTCAAGGCCAAATGGGTTTTGTCAACGGTGCTGTCTCCCTTCTTGGAGATGCTCATTAGCTTATCAA
AGACTGAGAAGTCCCGCTGTTACAGAAATAATTTAGTTTGTGTATTAACTGCTCCTGGGCCTGGAGCAGTATTC
CCACCTTAAGATTCCCAGCATCCCTGTGCTGTCCCGGCTCTCATTATGCCGAAGGGCCCAACCCATTGGCTGTG
TTCTGTTTGAAGATTGGGGGGCGCCTTCTCTTCTTCCCCAGGGAATTCTCTAGCAGAGGGAGGGGACCCACCC
CAGTGAGGAAGTAGATTGCTGCCTCTAGCCAGAGACCTGAACTGGGGAAATTGAACATTCTTTTACATTGTTGGA
GAAATGAAGCCAAAGTTATTACAGATGGTTTTCCAGGCTAAAGGAAAGTCACCTGCAAGAGATCCCGGCACTGAT
CTGGAGCAGCTGACAGGGTGGGTCTCCCTTACCAAAGAGAAGAACCACTCTCTGGCGCTGGGGTGACCTGCTGGC
TGGGCCTGTAAGGTTTTCCATGTTGCTGAGGCCATGGAGATTCCAGAGCTGGTACACCGACCGCTCTCAGGGCC
CGCTGCCCTGGGCTGGCAACACCATTTCTGGCCTTGGCCTGCAGAACTTTCAGAGTCTTCACTGGCAGTAGGGGG
AGATGGGGAGAGGAATGATCTCTGCCAGCCCCCTTCCCTTCCAAACCATGCAATGGAAGAGCCAGATGGGTGAA
GATTGATTTTGCCTTAACTCAAGAGAATTCCTGTTCTCCTTGTGCTATGATTTGGACACAAGATTCTGGATACCT
GGAACCTAGCTGTGTACTCCTGTACCCTAAACAGTGGATTGAGTTCCAGCGTTTATTCTTTTTTCTTTTTTCA
GATCACCATCTAAGTTACATCTTTAGCTCAGGTCCATCCTTCTCAAGATCTCCTTCTTAGCCCCCAGCCCCCTGG
TGCTGTCTGTGGTACGGTGACCTTACTCAGGAGCAGATATCTCCTTGGCCGCCATGGAGCCTCATCCATCCACAC
GTGCCTGTAGCATTCAGAGCTCACTGCCCTTCTAGATGTGCCCTTCCGCTTGGCTTCCAGCGGCTTGTGCTCAC
TCTGTCTGCCAGGTATGAGAAGAACACGTAAGACCGCCACCACACTCACCTCCCTCAAGGCCCTGTGCCATAGG
GGTGGCCACCCGACCTGCCCCAGAACTTTTGGATACTGGAGGCAGTTGCATAGGTCTCCCTCTCTGGGCACCCAG
GACTCAGTCCAGCCCAAGACTACTCTGGGCAGTCCCATCCAGTCTGGGGCCATTGTCAGACTCAGGAAAGGAT
TTCTACAGTGTCTATAAAAGCCAAAAGAGAGAGTGGGTTTGGGAAGAGTGAGGGTGGTTGGGGAGAGGGGACCG
ATGTGCCTCATGTTTGTGGTGATTACAAATATGCTTTCTGGATAAAGTTTGGTTGTTTGTCTTAAAAAAA
AAAAAAAAAAAAAAGTCGA

WO 2004/030615

PCT/US2003/028547

3332/6881
FIGURE 3071

MLPPPPRQPPQARAARGAVRLQRPFLRSPLGVLRLQLLAGAAFWITIATSKYQGPVHFALFVSVLFWLLTLGL
YFLTLLGKHELVPVLGSRWLMVNVAHDLAAALYGAATGIMSDQMRHSYCNLKDYLPCAYHAFIAAAVCGGVC
HGLYLLSALYGCGRRCQGKQEVA

WO 2004/030615

PCT/US2003/028547

3333/6881
FIGURE 3072

GATGGAGCCCGACCATCCTTTCTACAGCAACATCAGTAAGGATCGCAGGTATGCAGACCTCACAGAAGATCAGCT
ACCCCTCCTGTGAGAGTCTGAAGGATACTATTGCCAGAGCTCTGCCCTTCTGGAATGAAGAAATAGTTCCCCAGAT
CAAGGAGGGGAAACGTGTACTGATTGCAGCCCATGGCAACAGCCTCCGGGGCATTGTCAAGCATCTGGAGGGTCT
CTCTGAAGAGGCTATCATGGAGCTGAACCTGCCGACTGGTATTCCCATTTGTCTATGAATTGGACAAGAACAAGTG
AAGGCCGGCGGGGAGGATACTGTCCCGAGTGCTTCCTGGTGTGTGTATTAGAATCCCTTCCTGCCTTGTTTCATG
GCAGTGAAATGCCTCTTGGTCCTGTCCAAGTGATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACCC
TGCCACATGGGTCCAGTGTTTCATCTGAGCATAACTGTACTAAATCCTTTTTCCATATCAGTATAATAAAGGAGTG
ATGTGCAATA

WO 2004/030615

PCT/US2003/028547

3334/6881
FIGURE 3073

GGTTGAGGATGGGCTGGCGGGCGGGTCCGGGTCCGCTGCCCTGGCGCTGCGGGCGGCGGGCCATGGTGGTTTGGATT
GAGCCGGGCCCCGGCCGGGGCGCCGAGTCGGAGGGGGTGGCAGTGAGCGGCGGCAGAGGCTACGGGGCTCGGTTTG
GCTGACTGGGGAGTCGGCAGGCGGCAGGAACCATGCGAGGCCAGCGGAGCCTGCTGCTGGGCCCCGGCCGCCTCT
GCCTCCGCCTCCTTCTGCTGCTGGGTTACAGGCGCCGCTGTCCACCTCTACTCCGGGGTCTAGTACAGCGCTGGC
GCTACGGCAAGGTCTGCCTGCGCTCCCTGCTCTACAACTCCTTTGGGGGCAGTGACACCGCTGTTGATGCTGCCT
TTGAGCCTGTCTACTGGCTGGTAGACAACGTGATCCGCTGGTTTGGAGTGGTGTTCGTGGTCTGGTGATCGTGC
TGACAGGCTCCATTGTAGCTATCGCCTACCTGTGTGCTCCTGCTCTCATCTCCGAACCTACTCAGTGCCACGAC
TCTGCTGGCATTCTTCTATAGCCACTGGAATCTGATCCTGATTGCTTCCACTACTACCAGGCCATCACCCTC
CGCCTGGGTACCCACCCCAGGGCAGGAATGATATCGCCACCGTCTCCATCTGTAAGAAGTGCAATTTACCCCAAGC
CAGCCCGAACACACCACTGCAGCATCTGCAACAGGTGTGTGCTGAAGATGGATCACCCTGCCCTGGCTAAACA
ATTGTGTGGGCCACTATAACCATCGGTACTTCTTCTCTTTCTGCTTTTTCATGACTCTGGGCTGTGTCTACTGCA
GCTATGGAAGTTGGGACCTTTTCCGGGAGGCTTATGCTGCCATTGAGAAAATGAAACAGCTCGACAAGAACAAAC
TACAGGCGGTTGCCAACCCAGACTTATCACCAGACCCACCACCCACCTTCTCCTTTTCGAGAAAGGATGACTCACA
AGAGTCTTGTCTACCTCTGGTTCCCTGTGCAGTTCTGTGGCACTTGCCCTGGGTGCCCTAACTGTATGGCATGCTG
TTCTCATCAGTCGAGGTGAGACTAGCATCGAAAGGCACATCAACAAGAAGGAGAGACGTCGGCTACAGGCCAAGG
GCAGAGTATTTAGGAATCCTTACAACCTACGGCTGCTTGGACAACCTGGAAGGTATTCCTGGGTGTGGATACAGGAA
GGCACTGGCTTACTCGGGTGCTCTTACCTTCTAGTCACTTGCCCCATGGGAATGGAATGAGCTGGGAGCCCCCTC
CCTGGGTGACTGCTCACTCAGCCTCTGTGATGGCAGTGTGAGCTGGACTGTGTGAGCCACGACTCGAGCACTCAT
TCTGCTCCCTATGTTATTTCAAGGGCCTCCAAGGGCAGCTTTTCTCAGAATCCTTGATCAAAAAGAGCCAGTGGG
CCTGCCTTAGGGTACCATGCAGGACAATTCAAGGACCAGCCTTTTACCCTGCAGAAGAAAGACACAATGTGGA
GAAATCTTAGGACTGACATCCCTTTACTCAGGCAAACAGAAGTTCCAACCCAGACTAGGGGTGAGGCAGCTAGC
TACCTACCTTGCCAGTGCTGACCCGGACCTCCTCCAGGATACAGCACTGGAGTTGGCCACCACCTCTTCTACTT
GCTGTCTGAAAAACACCTGACTAGTACAGCTGAGATCTTGGCTTCTCAACAGGGCAAAGATACCAGGCCTGCTG
CTGAGGTCACTGCCACTTCTCACATGCTGCTTAAGGGAGCACAAATAAAGGTATTCGATTTTTAAAGAT

WO 2004/030615

PCT/US2003/028547

3335/6881
FIGURE 3074A

GGGCGGGAGGACTCGACTCGGTGGGAGCCGCTAGAGCCGGGCGCCCGGGACGTAGCCTGTAGGGCCACCGGGTC
CCCGTCAGAGGCGGGCGGGAGCAGCGGGGACTGCAGGCCGGGTGCAGCGAACGCGACCCCGGGGCTGCGGC
CCGGTGTGTGCGGAGCGTGGCGGGCGCAGCTTACCGGGCGGAGGTGAGCGCGGCGCCGGCTCCTCCTGCGGCGGA
CTTTGGGTGCGACTTGACGAGCGGTGGTTTCGACAAGTGGCCTTGCGGGCCGGATCGTCCCAGTGGAAGAGTTGTA
AATTTGCTTCTGGCCTTCCCTACGGATTATACCTGGCCTTCCCTACGGATTATACTCAACTTACTGTTTAGAA
AATGTGGCCACGAGACGCTGGTTACTATCAAAAGGAGCGGGGTGACGGTCCCCACTTTCCCTGAGCCTCAG
CACCTGCTTGTGTTGAAGGGGTATTGAATGTGACATCCGTATCCAGCTTCTGTGTTGTGTCAAAACAACATTGCAA
AATTGAAATCCATGAGCAGGAGGCAATATTACATAATTTAGTTCCACAAATCCAACACAAGTAAATGGGTCTGT
TATTGATGAGCCTGTACGGCTAAAACATGGAGATGTAATAACTATTATTGATCGTTTCTTCAGGTATGAAAATGA
AAGTCTTCAGAATGGAAGGAAGTCAACTGAATTTCCAAGAAAAATACGTGAACAGGAGCCAGCAGCTCGTGTCTC
AAGATCTAGCTTCTCTCTGACCCTGATGAGAAAGCTCAAGATTCCAAGGCCTATTCAAAAATCACTGAAGGAAA
AGTTTCAGGAAATCCTCAGGTACATATCAAGAATGTCAAAGAAGACAGTACCGCAGATGACTCAAAAGACAGTGT
TGCTCAGGGAACAATAATGTTTCAATTCCTCAGAACATGCTGGACGTAATGGCAGAAATGCAGCTGATCCCATTTT
TGGGGATTTTAAAGAAATTTCCAGCGTTAAATTAGTGAGCCGTTATGGAGAATTGAAGTCTGTTCCCACTACACA
ATGCTTGTGACAATAGCAAAAAAATGAATCTCCCTTTTGGAAGCTTTATGAGTCAGTGAAGAAAGAGTTGGATGT
AAAATCACAAAAAGAAATGTCTACAGTATTGTAGAAAATCTGGATTACAACTGATTACGCAACAGAGAAAGA
AAGTGCTGATGGTTTACAGGGGGAGACCAACTGTTGGTCTCGCGTAAGTCAAGACCAAAATCTGGTGGGAGCGG
CCACGCTGTGGCAGAGCCTGCTTACCTGAACAAGAGCTTGACCAGAACAAGGGGAAGGGAAGAGACGTGGAGTC
TGTTAGACTCCCAGCAAGGCTGTGGGCGCCAGCTTCTCTCTATGAGCCGGCTAAAATGAAGACCCCTGTACA
ATATTCACAGCAACAAATTTCTCCACAAAAACATAAGAACAAGACCTGTATACTACTGGTAGAAGAGAATCTGT
GAATCTGGGTAAAAGTGAAGGCTTCAAGGCTGGTGATAAACTCTTACTCCAGGAAGCTTTCAACTAGAAATCG
AACACCAGCTAAAGTTGAAGATGCAGCTGACTCTGCCACTAAGCCAGAAAAATCTCTCTTCCAAAACAGAGGAAG
TATTCCTACAGATGTGGAAGTTCTGCCTACGGAACCTGAAATTCACAATGAGCCATTTTTAACTCTGTGGCTCAC
TCAAGTTGAGAGGAAGATCCAAAAGGATTCCCTCAGCAAGCCTGAGAAAATTGGGCACTACAGCTGGACAGATGTG
CTCTGGGTTACCTGGTCTTAGTTTCAAGTTGATATCAACAACCTTTGGTGATTCCATTAATGAGAGTGAGGGAATACC
TTTGAAGAAGAGGCGTGTGTCTTTGGTGGGCACCTAAGACCTGAACTATTTGATGAAAACCTTGCTCTCTAATAC
GCCTCTCAAAGGGGAGAAAGCCCCAACCAAAAGAAAGTCTCTGGTAATGCACACTCCACCTGTCTGAAGAAAAT
CATCAAGGAACAGCCTCAACCATCAGGAAAACAAGAGTCAGGTTTCAAGAAATCCATGTGGAAGTGAAGGCACAAAG
CTTGGTTATAAGCCCTCCAGCTCCTAGTCTTAGGAAAACCTCAGTTGCCAGTGATCAACGCCGTAGGTCTGCAA
AACAGCCCCTGCTTCCAGCAGCAATCTCAGACAGAGGTTTCTAAGAGAGGAGGGAGAAAGAGTGGCAACCTGCC
TTCAAAGAGAGTGTCTATCAGCCGAAGTCAACATGATATTTTACAGATGATATGTTCCAAAAGAAGAAGTGGTGC
TTCGGAAGCAAATCTGATTGTTGCAAAATCATGGGCAGATGTAGTAAACTTGGTGCAAAACAAACACAACTAA
AGTCATAAAACATGGTCTTCAAAGGTCAATGAACAAAAGGCAAGAGACCTGCTACTCCAAAGAAGCCTGTGGG
CGAAGTTCACAGTCAATTTAGTACAGGCCACGCAACTCTCCTTGTAACATAATAATAGGGAAAGCTCATACTGA
AAAAGTACATGTGCTGCTCGACCCTACAGAGTGTCTCAACAACCTTCAATTTCCAACCAAAAAATGGACTTTAAGGA
AGATCTTTTCAAGAAATAGCTGAAATGTTCAAGACCCAGTGAAGGAGCAACCGCAGTTGACAAGCACATGTACAT
CGCTATTTCAAATTCAGAGAATTTGCTTGGAACACAGTTTCAAGGAACCTGATTGAGGAGAAGAACCTCTGCTCCC
CACCTCAGAGAGTTTTGGAGGAAATGTGTTCTTCAAGTGCACAGAATGCAGCAAAACAGCCATCTGATAAATGCTC
TGCAAGCCCTCCCTTAAGACGGCAGTGTATTAGAGAAAATGGAAACGTAGCAAAACGCCCAGGAACACCTACAA
AATGACTTCTCTGGAGACAAAACCTTCAAGTACTGAGACAGAGCCTTCAAAAACAGTATCCACTGCAACAGGTC
AGGAAGGTCTACAGAGTTCAGGAATATACAGAAGCTACCTGTGGAAAGTAAAGAGTGAAGAAACAAATACAGAAAT
TGTTGAGTGCATCTTAAAGAGGTCAGAAGGCAACACTACTACAACAAAGGAGAGAGAGAGATGAAGGAAAT
AGAAAGACCTTTTGAGACATATAAGGAAAATATTGAATTAAGAAAACGATGAAAAGATGAAGCAATGAAGAG
ATCAAGAACTTGGGGGCAGAAATGTGCACCAATGTCTGACCTGACAGACCTCAAGAGCTTGCTGATACAGAACT
CATGAAAGACACGGCACGTGGCCAGAAATCTCTCAAACCCAAGATCATGCCAAGGCACCAAGAGTGAAGAAAGG
CAAAATCACTAAAATGCCCTGCCAGTCATTACAACAGAACCAATAAACACCCCAACACACACAAAAACAACAGTT
GAAGGCATCCCTGGGGAAGTAGGTGTGAAAGAAGAGCTCCTAGCAGTCGGCAAGTTTACACCGGACGTGAGGGGA
GACCACGCACACGCACAGAGAGCCAGCAGGAGATGGCAAGAGCATCAGAACGTTTAAAGAGTCTCCAAAGCAGAT

WO 2004/030615

PCT/US2003/028547

3336/6881
FIGURE 3074B

CCTGGACCCAGCAGCCCCGTGTAAGTGAAGTGGCCAAGAAGCGCTAAGGAAGAGGCCAGTCACTAGA
AGACCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCCCTCTGAGGAATCAATGACTGATGAGAAAAC
CAAAATAGCCTGCAAATCTCCACCACCAGAATCAGTGGACACTCCAACAAGCACAAAGCAATGGCCTAAGAGAAG
TCTCAGGAAAGCAGATGTAGAGGAAGAATTCTTAGCACTCAGGAACTAACACCATCAGCAGGGAAAGCCATGCT
TACGCCCCAAACCAGCAGGAGGTGATGAGAAAGACATTAAAGCATTTATGGGAATCCAGTGCAGAACTGGACCT
GGCAGGAACCTTTACCTGGCAGCAAAAGACAGCTACAGACTCCTAAGGAAAAGGCCAGGCTCTAGAAGACCTGGC
TGGCTTTAAAGAGCTCTTCCAGACTCCTGGTACACCCGAGGAATTAGTGGCTGCTGGTAAAACCACTAAAATACC
CTGCGACTCTCCACAGTCAGACCCAGTGGACACCCCAACAAGCACAAAGCAACGACCCAAGAGAAGTATCAGGAA
AGCAGATGTAGAGGGAGAACTCTTAGCGTGCAGGAATCTAATGCCATCAGCAGGCAAAGCCATGCACACGCCTAA
ACCATCAGTAGGTGAAGAGAAAAGACATCATATTTGTGGGAATCCAGTGCAGAACTGGACCTGACAGAGAA
CTTAACCGGCAGCAAGAGACGGCCACAAACTCCTAAGGAAGAGGCCAGGCTCTGGAAGACCTGACTGGCTTTAA
AGAGCTCTTCCAGACCCCTGGTCATACTGAAGAAGCAGTGGCTGCTGGCAAACTACTAAAATGCCCTGCGAATC
TTCTCCACCAGAATCAGCAGACACCCCAACAAGCACAAAGAAGGCAGCCCAAGACACCTTTGGAGAAAAGGGACGT
ACAGAAGGAGCTCTCAGCCCTGAAGAAGCTCACACAGACATCAGGGGAAACCACACACAGATAAAGTACCAGG
AGGTGAGGATAAAAGCATCAACGCGTTTAGGGAACTGCAAAACAGAACTGGACCCAGCAGCAAGTGTAACTGG
TAGCAAGAGGCACCCAAAACTAAGGAAAAGGCCAACCCCTAGAAGACCTGGCTGGCTTGAAAGAGCTCTTCCA
GACACAGTATGCACTGACAAGCCACGACTCACGAGAAAATACCAAAATAGCCTGCAGATCACAACCAGACCC
AGTGGACACACCAACAAGCTCCAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGTGGACGTAGAAGAAGAATTCTT
CGCACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGTAAGTGGTGAGAAAA
CATCTACGATTTATGGGAATCCAGTGCAGAACTGGACCTGACAGAGAATTAAGTGGCAGCAAGAGACGGCT
ACAACTCCTAAGGAAAAGGCCAGGCTCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACACGAGGTCA
CACTGAGGAATCAATGACTAACGATAAACTGCCAAAGTAGCCTGCAAACTCTTCAACAACCAGACCCAGACAAAA
CCCAGCAAGCTCCAAGCGACGGCTCAAGACATCCCTGGGGAAGTGGGCGTGAAAGAAGAGCTCCTAGCAGTTGG
CAAGCTCACACAGACATCAGGAGAGACTACACACACACACAGAGCCAAACAGGAGATGGTAAGAGCATGAAAGC
ATTTATGGAGTCTCCAAAGCAGATCTTAGACTCAGCAGCAAGTCTAAGTGGCAGCAAGAGGCAGCTGAGAACTCC
TAAGGGAAAGTCTGAAGTCCCTGAAGACCTGGCCGGCTTCATCGAGCTCTTCCAGACACCAAGTCACACTAAGGA
ATCAATGACTAACGAAAAACTACCAAGTATCCTACAGAGCTTCACAGCCAGACCTAGTGGACACCCCAACAAG
CTCCAAGCCACAGCCCAAGAGAAGTCTCAGGAAAGCAGACACTGAAGAAGAATTTTAGCATTTAGGAAACAAAC
GCCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGTAGGTGAAGAGAAAGACATCAACACGTTTTTGGG
AACTCCAGTGCAGAACTGGACAGCCAGGAAATTTACCTGGCAGCAATAGACGGCTACAACTCGTAAGGAAAA
GGCCAGGCTCTAGAAGAAGTACTGGCTTCAGAGAGCTTTTCCAGACACCATGCACTGATAACCCACGACTGA
TGAGAAAATACCAAAAAATACTCTGCAATCTCCGCAATCAGACCCAGCGGACACCCCAACAACACAAAGCA
ACGGCCCAAGAGAAGCCTCAAGAAAGCAGACGTAGAGGAAGAATTTTAGCATTCAGGAACTAACACCATCAGC
AGGCAAAGCCATGCACACGCCTAAAGCAGCAGTAGGTGAAGAGAAAGACATCAACACATTTGTGGGGACTCCAGT
GGAGAACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACGGCCACAACTCCTAAAGAAAAGGCCAAGGC
TCTAGAAGATCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCACTGAGGAATCAATGACCGATGACAA
AATCACAGAAGTATCCTGCAATCTCCACAACCAGACCCAGTCAAAACCCCAACAAGCTCCAAGCAACGACTCAA
GATATCCTTGGGGAAAGTAGGTGTGAAAGAAGAGGTCTTACCAGTCGGCAAGCTCACACAGACGTGAGGGAAGAC
CACACAGACACACAGAGAGACAGCAGGAGATGGAAAGAGCATCAAAGCGTTTAAGGAATCTGCAAAGCAGATGCT
GGACCCAGCAAATATGGAATGGGATGGAGAGGTGGCCAAGAACACCTAAGGAAGAGGCCCAATCACTAGAAGA
CCTGGCCGGCTTCAAAGAGCTCTTCCAGACACCAGACCACTGAGGAATCAACAATGATGACAAAACCTACCAA
AATAGCCTGCAAATCTCCACCACCAGAATCAATGGACACTCCAACAAGCACAAAGGAGCGGCCCAAAACACCTTT
GGGGAAGAGGATATAGTGAAGAGCTCTCAGCCCTGAAGCAGCTCACACAGACCACACACAGACAAAGTACC
AGGAGATGAGGATAAAGGCATCAACGTGTTTCAAGGAACTGCAAAACAGAACTGGACCCAGCAGCAAGTGTAAAC
TGGTAGCAAGAGGCAGCCAAGAACTCCTAAGGGAAAAGCCCAACCCCTAGAAGACTTGGCTGGCTTGAAAGAGCT
CTTCCAGACACCAATATGCACTGACAAGCCACGACTCATGAGAAAATACCAAAATAGCCTGCAGATCTCCACA
ACCAGACCCAGTGGGTACCCCAACAATCTTCAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGCAGACGTAGAGGA
AGAATCCTTAGCACTCAGGAAACGAACACCATCAGTAGGGAAGCTATGGACACACCCAAACCAGCAGGAGGTGA

WO 2004/030615

PCT/US2003/028547

3337/6881
FIGURE 3074C

TGAGAAAGACATGAAAGCATTATGGAAGCTCCAGTGCAGAAATTGGACCTGCCAGGAAATTTACCTGGCAGCAA
AAGATGGCCACAACTCCTAAGGAAAAGGCCAGGCTCTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCAGAC
ACCAGGCACTGACAAGCCACGACTGATGAGAAAACCTACCAAAATAGCCTGCAAACTCCACAACCAGACCCAGT
GGACACCCAGCAAGCACAAAGCAACGGCCCAAGAGAACTCTCAGGAAAGCAGACGTAGAGGAAGAATTTTATAGC
ACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGGACACACCAAAACCAGCAGTAAGTGATGAGAAAAATAT
CAACACATTTGTGGAAGCTCCAGTGCAGAACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACAGCCACA
GACTCCTAAGGAAAAGGCTGAGGCTCTAGAGGACCTGGTTGGCTTCAAAGAACTCTTCCAGACACCAGGTACAC
TGAGGAATCAATGACTGATGACAAAATCACAGAAGTATCCTGTAAATCTCCACAGCCAGAGTCATTCAAAACCTC
AAGAAGCTCCAAGCAAAGGCTCAAGATACCCCTGGTGAAAGTGGACATGAAAGAAGAGCCCCCTAGCAGTCAGCAA
GCTCACACGGACATCAGGGGAGACTACGCAAACACACACAGAGCCAACAGGAGATAGTAAGAGCATCAAAGCGTT
TAAGGAGTCTCAAAGCAGATCCTGGACCCAGCAGCAAGTGTAACGGTAGCAGGAGGCAGCTGAGAAGCTCGTAA
GGAAAAGGCCCGTGCTCTAGAAGACCTGGTTGACTTCAAAGAGCTCTTCTCAGCACCAGGTACACTGAAGAGTC
AATGACTATTGACAAAAACAAAAATTCCTGCAATCTCCCCACCAGAACTAACAGACACTGCCACGAGCAC
AAAGAGATGCCCCAAGACACGTCCAGGAAAGAAGTAAAGAGGAGCTCTCAGCAGTTGAGAGGCTCAGCAAAC
ATCAGGGCAAAGCACACACACACAAAGAACCAGCAAGCGGTGATGAGGGCATCAAAGTATTGAAGCAACGTGC
AAAGAAGAAACCAAACCCAGTAGAAGAGGAACCCAGCAGGAGAAGGCCAAGAGCACCTAAGGAAAAGGCCAAC
CCTGGAAGACCTGGCCGGCTTCACAGAGCTCTCTGAAACATCAGGTACACTCAGGAATCACTGACTGCTGGCAA
AGCCACTAAAATACCTGCGAATCTCCCCACTAGAAGTGGTAGACACCACAGCAAGCACAAAGAGGCATCTCAG
GACACGTGTGCAGAAGGTACAAGTAAAGAAGAGCCTTCAGCAGTCAAGTTCACACAAACATCAGGGGAAACCAC
GGATGCAGACAAAGAACCAGCAGGTGAAGATAAAGGCATCAAAGCATTGAAGGAATCTGCAAAACAGACACCGGC
TCCAGCAGCAAGTGTAAGTGGCAGCAGGAGACGGCCAAGAGCACCCAGGAAAGTGCCCAAGCCATAGAAGACCT
AGCTGGCTTCAAAGACCCAGCAGCAGGTACACTGAAGAAATCAATGACTGATGACAAAACCACTAAAATACCTG
CAAATCATCACCAGAACTAGAAGACACCGCAACAAGCTCAAAGAGACGGCCAGGACACGTGCCAGAAAGTAGA
AGTGAAGGAGGAGCTGTTAGCAGTTGGCAAGCTCACACAAACCTCAGGGGAGACCACGCACACCGACAAAGAGCC
GGTAGGTGAGGGCAAAGGCACGAAAGCATTAAAGCAACCTGCAAAAGCGGAAGCTGGACGCAGAAGATGTAATTGG
CAGCAGGAGACAGCCAAGAGCACCTAAGGAAAAGGCCAACCCCTGGAAGATCTGGCCAGCTTCCAAGAGCTCTC
TCAAACACCAGGCCACACTGAGGAAGTGGCAATGGTGCTGCTGATAGCTTTACAAGCGCTCCAAAGCAAACACC
TGACAGTGGAAAACCTCTAAAAATATCCAGAAGAGTTCTTCGGGCCCCCTAAAGTAGAACCCGTGGGAGACGTGGT
AAGCACCAGAGACCCCTGTAAATCACAAAGCAAAGCAACACTTCCCTGCCCCCACTGCCCTTCAAGAGGGGAGG
TGGCAAAGATGGAAGCGTCACGGGAACCAAGAGGCTGCGCTGCATGCCAGCACCAGAGGAAATTGTGGAGGAGCT
GCCAGCCAGCAAGAAGCAGAGGGTTGCTCCAGGGCAAGAGGCAAATCATCCGAACCCGTGGTCATCATGAAGAG
AAGTTTGAGGACTTCTGCAAAAAGAAATTGAACCTGCGGAAGAGCTGAACAGCAACGACATGAAAACCAACAAAGA
GGAACACAAATTACAAGACTCGGTCCCTGAAAAATAAGGGAATATCCCTGCGCTCCAGACGCCAAAATAAGACTGA
GGCAGAACAGCAAATAACTGAGGTCTTTGTATTAGCAGAAAGAATAGAAAATAAACAGAAATGAAAAGAAGCCCAT
GAAGACCTCCCCAGAGATGGACATTGAGAATCCAGATGATGGAGCCCCGAAACCCATACCTAGAGACAAAGTCAC
TGAGAACAAAAGGTGCTTGAGGTCTGCTAGACAGAATGAGAGCTCCAGCCTAAGGTGGCAGAGGAGAGCGGAGG
GCAGAAGAGTGCGAAGGTTCTCATGCAGAATCAGAAAGGGAAAGGAGAAGCAGGAAATTCAGACTCCATGTGCCT
GAGATCAAGAAAGACAAAAGCCAGCCTGCAGCAAGCACTTTGGAGAGCAAATCTGTGCAGAGAGTAACGCGGAG
TGTCAGAGGTGTGCAGAAAATCCAAAGAAGGCTGAGGACAATGTGTGTGTCAAGAAAATAAGAACCAGAAGTCA
TAGGGACAGTGAAGATATTTGACAGAAAAATCGAACTGGGAAAAATATAATAAAGTTAGTTTTGTGATAAGTTCT
AGTGCAATTTTTGTGATAAATACAAGTGAATCTGTAAAGTAAGGCTGTGAGTCTGCTTAAGGGAAGAAAACCTT
GGATTTGCTGGGTCTGAATCGGCTTCATAAACTCCACTGGGAGCACTGCTGGGCTCCTGGACTGAGAATAGTTGA
ACACCGGGGGCTTTGTGAAGGAGTCTGGGCCAAGGTTTGCCCTCAGCTTTGCAGAAATGAAGCCTTGAGGTCTGTC
ACCACCCACAGCCACCCTACAGCAGCCTTAAGTGTGACACTTGCCACACTGTGTCGTCGTTTGTGTTGCCTATGTC
CTCCAGGGCAGCGTGGCAGGAACAACTATCCTCGTCTGTCCCAACACTGAGCAGGCACTCGGTAAACACGAATGA
ATGGATGAGCGCACGGATGAATGGAGCTTACAAGATCTGTCTTTCCAATGGCCGGGGGCATTGGTCCCCAAATT
AAGGCTATTGGACATCTGCACAGGACAGTCTATTTTTGATGTCTTTCTTTCTGAAAATAAAGTTTTGTGCTT
TGGAGAATGACTCGTGAGCACATCTTTAGGGACCAAGAGTGACTTTCTGTAAGGAGTGACTCGTGGCTTGCCCTT

WO 2004/030615

PCT/US2003/028547

3338/6881
FIGURE 3074D

GTCTCTTGGGAATACTTTTCTAACTAGGGTTGCTCTCACCTGAGACATTCTCCACCCGCGGAATCTCAGGGTCCC
AGGCTGTGGGCCATCACGACCTCAAACCTGGCTCCTAATCTCCAGCTTTCCCTGTCATTGAAAGCTTCGGAAGTTTA
CTGGCTCTGCTCCCGCTGTTTTCTTTCTGACTCTATCTGGCAGCCCCGATGCCACCCAGTACAGGAAGTGACACC
AGTACTCTGTAAAGCATCATCATCTTGGAGAGACTGAGCACTCAGCACCTTCAGCCACGATTTCAGGATCGCTT
CCTTGTGAGCCGCTGCCTCCGAAATCTCCTTTGAAGCCCAGACATCTTTCTCCAGCTTCAGACTTGTAGATATAA
CTCGTTTCATCTTCATTTACTTTCCACTTTGCCCCCTGTCTCTCTGTGTTCCCCAAATCAGAGAATAGCCCCGCCA
TCCCCCAGGTACCTGTCTGGATTCTCCCCATTACCCACCTTGCCAGGTGCAGGTGAGGATGGTGCACCAGAC
AGGGTAGCTGTCCCCCAAATGTGCCCTGTGCGGGCAGTGCCCTGTCTCCACGTTTGTTCCTCCAGTGTCTGGCG
GGGAGCCAGGTGACATCATAAATACTTGCTGAATGAATGCAGAAATCAGCGGTACTGACTTGTACTATATTGGCT
GCCATGATAGGGTTCTCACAGCGTCATCCATGATCGTAAGGGAGAATGACATTCTGCTTGAGGGAGGGAATAGAA
AGGGGCAGGGAGGGGACATCTGAGGGCTTCACAGGGCTGCAAAGGGTACAGGGATTGCACCAGGGCAGAACAGGG
GAGGGTGTTCAAGGAAGAGTGGCTCTTAGCAGAGGCACCTTTGGAAGGTGTGAGGCATAAATGCTTCCTTCTACGT
AGGCCAACCTCAAAACTTTTCAGTAGGAATGTTGCTATGATCAAGTTGTTCTAACACTTTAGACTTAGTAGTAATT
ATGAACCTCACATAGAAAAATTTTCATCCAGCCATATGCCTGTGGAGTGGAATATTCTGTTTAGTAGAAAAATCCT
TTAGAGTTCAGCTCTAACCCAGAAATCTTGCTGAAGTATGTCAGCACCTTTTCTCACCTGGTAAGTACAGTATTT
CAAGAGCACGCTAAGGGTGGTTTTTCATTTTACAGGGCTGTTGATGATGGGTTAAAAATGTTTCATTTAAGGGCTAC
CCCCGTGTTTAATAGATGAACACCACTTCTACACAACCTCCTTGGTACTGGGGGAGGGAGAGATCTGACAAATA
CTGCCCCATTCCCCTAGGCTGACTGGATTGAGAACAAATACCCACCCATTTCCACCATGGTATGGTAACTTCTCT
GAGCTTCAGTTTCCAAGTGAATTTCCATGTAATAGGACATTCCCATTAATAACAAGCTGTTTTTACTTTTTTCGCC
TCCCAGGGCCTGTGGGATCTGGTCCCCAGCCTCTCTTGGGCTTTCTTACACTAACTCTGTACCTACCATCTCCT
GCCTCCCTTAGGCAGGCACCTCCAACCACCACACACTCCCTGCTGTTTTCCCTGCCTGGAACCTTCCCTCCTGCC
CCACCAAGATCATTTTCATCCAGTCTGAGCTCAGCTTAAGGGAGGCTTCTTGCTGTGGGTTCCCTCACCCCCAT
GCCTGTCTCCAGGCTGGGGCAGGTCTTAGTTTGCTGGAATTGTTCTGTACCTCTTTGTAGCACGTAGTGTTG
TGGAACCTAAGCCACTAATTGAGTTTCTGGCTCCCCCTCCTGGGGTTGTAAGTTTTGTTTCATTCATGAGGGCCGAC
TGCATTTCTGTTACTCTATCCCAGTGACCAGCCACAGGAGATGTCCAATAAAGTATGTGATGAAATGGTCTT

WO 2004/030615

PCT/US2003/028547

3339/6881
FIGURE 3075

CGCGGACGGGGCGCGGGCGGACGATGGAACCTCCACATCTGGAGCACC GGCTGCAAGTTGCCAGCGTCGCCAAGGA
GAGTATCCCGCTGTTTACCTACGGCCTGATCAAACCTTGCCCTTCTGTCTCTCCAAGACCAGAAGATGATGATTATT
CTCCACCGTCTAAGAGACCAAGGCCAATGAGCTACCGCAGCCACCAGTCCCGGAACCCGCCAATGCTGGGAAGC
GGAAAGTGAGGGAGTTCAACTTCGAGAAATGGAATGCTCGCATCACTGATCTACGTAAACAAGTTGAAGAATTGT
TTGAAAGGAAATATGCTCAAGCCATAAAAGCCAAAGGTCCGGTGACGATCCCGTACCCTCTTTTCTAGTCTCATG
TTGAAGATCTTTATGTAGAAGGACTTCTGAAGGAATTCCTTTTGAAGGCCATCTACTTACGGAATTCCTCGCC
TGGAGAGGATATTACTTGCAAAGGAAAGGATTTCGTTTTGTGATTAAAGAAACATGAGCTTCTGAGTTCAACACGTG
AAGATTTACAGCTTGATAAGCCAGCTTCAGGAGTAAAGGAAGAATGGTATGCCAGAATCACTAAATTAAGAAAGA
TGGTGGATCAGCTTTTCTGCAAAAAATTTGCGGAAGCCTTGGGGAGCACTGAAGCCAAGGCTGTACCGTACCAAA
AATTTGAGGCACACCCGAATGATCTGTACGTGGAAGGACTGCCAGAAAAACATTCCTTTCCGAAGTCCCTCATGGT
ATGGAATCCCAAGGCTGGAAAAAATCATTCAAGTGGGCAATCGAATTAAATTTGTTATTAAAGACCAGAACCTTC
TGACTCACAGTACCCTGAAGTTACTCAGCCAAGAACGAATACACCAGTCAAAGAAGATTGGAATGTCAGAATTA
CCAAGCTACGGAAGCAAGTGGAAGAGATTTTAAATTTGAAATTTGCTCAAGCTCTTGGACTCACCGAGGAGTA
AAGTACCATATCCTGTGTTTGAATCAAACCCGAGTCTTGTATGTGGAAGGCTTGCCAGAGGGGATTCCCTTCC
GAAGCCCTACCTGGTTTGAATTCACGACTTGAAAGGATCGTCCACGGGAGTAATAAAATCAAGTTCGTTGTTA
AAAAACCTGAAGTAGTTATTTCTACTTGCCCTCTGGGATGGCTAGTAAATAAAACTAAAGCTTTGCAGTCCC
CCAAAAGACCACGAAGTCTGGGAGTAATTCAAAGGTTCTGAAATTGAGGTACCGTGGAAGGCCCTAATAACA
ACAATCCTCAAACCTCAGCTGTTTGAACCCGACCCAGACTAACGGTTCTAACGTTCCCTTCAAGCCACGAGGGA
GAGAGTTTTCTTTGAGGCCTGGAATGCCAAAATCACGGACCTAAACAGAAAGTTGAAAATCTCTTCAATGAGA
AATGTGGGGAAGCTCTTGGCCTTAAACAAGCTGTGAAGGTGCCGTTTCGCGTTATTTGAGTCTTTCCCGGAAGACT
TTTATGTGGAAGGCTTACCTGAGGGTGTGCCATTCCGAAGACCATCGACTTTTGGCATTCCGAGGCTGGAGAAGA
TACTCAGAAACAAAGCCAAAATTAAGTTCATCATTAAAAAGCCGAAATGTTTGAGACGGCGATTAAGGAGAGCA
CCTCCTCTAAGAGCCCTCCCAGAAAAATAAATTCATCACCCAATGTTAATACTACTGCATCAGGTGTTGAAGACC
TTAACATCATTCAAGGTGACAATTCCAGATGATGATAATGAAAGACTCTCGAAAGTTGAAAAAGCTAGACAGCTAA
GAGAACAAGTGAATGACCTCTTTAGTCGGAATTTGGTGAAGCTATTGGTATGGGTTTTCTGTGAAAGTTCCCT
ACAGGAAAAATCACAATTAACCTTGCTGTGTGGTGGTTGATGGCATGCCCCCGGGGTGTCCTTCAAAGCCCCCA
GCTACCTGGAAATCAGCTCCATGAGAAGGATCTTAGACTCTGCCGAGTTTATCAAATTCACGGTCATTAGACCAT
TTCCAGGACTTGTGATTAATAACCAGCTGGTTGATCAGAGTGAGTCAAAGGCCCGTGATACAAGAATCAGCTG
AACCAGCCAGTTGGAAGTTCCAGCCACAGAAGAAATAAAAGAGACTGATGGAAGCTCTCAGATCAAGCAAGAAC
CAGACCCACGTTGGTAGACCTCTTCCCTCCTAGGCTTAAAGTATCAGTGTTGAGAAGAGCTTTTCGGACCTGTT
ACTACCCCAAGCTGTGTAATATACTTGTATAACAGAAATACCTTCTATACAAACCTTTTTTTTCTACTTTTAGATA
GAAATGTCTACTTTTTTACAGCAGTTCTGTGAATTAAAGAGCAGAGTGACTGTGGGTCTGGAATGGCTGGTGTACTT
GGGAATGTACTATCAGGATTTTACAGCAATGCTGGGAAATGACAGGGAAAATGACAGGAATGAATCTCACCAGAT
TTTTTATGTACTCAGCAGAGCCTTGAGTTACGGTGTATTTTCCAATCAAGTGAAGATATCTCCTACTTCTCCT
ACTGGAACATCTCAGCTTCTGCAGTGAAGAAAAATTCCTGTGATAGTTTCAAGTTCTTTAGTTTTTCTATTTGAAAA
AAAAAAATCATTTAAATGATCCTTTGTTACGGCTCTCCTTAATGACTGAGTGAACAGTTTCTATCTGTATATTT
GACTAAACCTTTTCTAAGCTATCTCTCATGGTTTCTATGTTTTTTTATCATAATTAAGCAAAACCATCTGGA
TCACCTAACAGTCAGAGGTCAGTATCTCAGCGTGTGAATTATAGAGGAAATACAGAGAGAACCTCTTCCACTTTT
ACTTTTCGTCCAAATAAAATGCATGGTGTACCAGAAGTTGAAGATCGGGTTGAGGATTGGGGCTAGCTCGATGAC
ACTAAGGCCCAACATCGCGGGACCTGCTGTGGCGCGGATTCTTAGGAACGCTGTTCTAGCCGGCCCCCTCTCCA
GGGGTCGCGGTGGCCGGCATTATTTCTAGTTCTTCTTGTAAACCTGAGGTGCCAGCGCGGGGAGTGAGGAGGGG
TCAGGGGGCTAAGGATGCAACCTCTGACGTTCTGCGCCTTCCTAGGAGAGTCTTACATGTGTTGAGATTTACAA
GCAATGCGAGTTGTAAAATACCAGCTCTACAAGAAGCTAGGCTCTGTGACGGCATAGTTTTTCACTAGCTTTATCA
CAATATTACAATGGAGAATTATATGACATGGTAGCAGAAATAGGCCCTTTTATGTGTTGCTTCTATTTTACCTC
AAATTGTAGATATAGGGTAATCAATAAAATCCATCCATGCCTTTTACACACT

WO 2004/030615

PCT/US2003/028547

3340/6881
FIGURE 3076

AATTCTGTCTCAGGCGCTGTCAGATCTGTGGTTTTTCTACTTGAAGGACACAATGTTTTCCAAACTAGCACAT
TTGCAGAGGTTTTGCTGTACTTAGTCGCGGAGTTTCAATCTTCAGTGGCTTCTGCTACATCTGTTGCAACTAAAAAA
ACAGTCCAAGGCCCTCCAACCTCTGATGACATTTTTGAAAGGGAATATAAGTATGGTGCACACAACTACCATCCT
TTACCTGTAGCCCTGGAGAGAGGAAAAGGTATTTACTTATGGGATGTAGAAGGCAGAAAAATATTTTGACTTCCTG
AGTTCTTACAGTGCTGTCAACCAAGGGCATTGTCACCCCAAGATTGTGAATGCTCTGAAGAGTCAAGTGGACAAA
TTGACCTTAACATCTAGAGCTTTCTATAATAACGTACTTGGTGAATATGAGGAGTATATTACTAACTTTTCAAC
TACCACAAAGTTCTTCCTATGAATACAGGAGTGGAGGCTGGAGAGACTGCCTGTAACTAGCTCGTAAGTGGGGC
TATACCGTGAAGGGCATTTCAGAAATACAAAGCAAAGATTGTTTTTGCACTGGGAACTTCTGGGGTAGGACGTTG
TCTGCTATCTCCAGTTCCACAGACCCAACCAGTTACGATGGTTTTGGACCATTATGCCGGGATTCGACATCATT
CCCTATAATGATCTGCCCGCACTGGAGCGTGCTCTTCAGGATCCAAATGTGGCTGCGTTTCATGGTAGAACCAATT
CAGGGTGAAGCAGGCGTTGTTGTTCCGGATCCAGGTTACCTAATGGGAGTGCAGAGAGCTCTGCACCAGGCACCAG
GTTCTCTTTATTGCTGATGAAATACAGACAGGATTGGCCAGAAGTGGTAGATGGCTGGCTGTTGATTATGAAAAAT
GTCAGACCTGATATAGTCCTCCTTGAAAGGCCCTTTCTGGGGGCTTATACCCGTGTCTGCAGTGCTGTGTGAT
GATGACATCATGCTGACCATTAAGCCAGGGGAGCATGGGTCCACATACGGTGGCAATCCACTAGGCTGCCGAGTG
GCCATCGCAGCCCTTGAGGTTTTAGAAGAAGAAAACCTTGCTGAAAATGCAGACAAATTGGGCATTATCTTGAGA
AATGAACTCATGAAGCTACCTTCTGATGTTGTAAGTCCGTAAGAGGAAAAGGATTATTAACGCTATTGTCATT
AAAGAAACCAAAGATTGGGATGCTTGGAAGGTGTGTCTACGACTTCGAGATAATGGACTTCTGGCCAAGCCAACC
CATGGCGACATTATCAGGTTTGCCTCCGCTGGTGATCAAGGAGGATGAGCTTCGAGAGTCCATTGAAATTATT
AACAAGACCATTCTGTCTTTCTGAGGGTAGCCAGCTGTTTTCAGTGGTCCCTGGGAGCCAGCTGGAGACAGGTGG
TCCTGTAAAAGCTTTATTCTAATGTGGGCACATTCCACTCCCATGAGTCTTCAAAAACTTTTTTTTGAATATA
TTTTTTTCAGTTGATACATAATAGAACAACGTTTATGAACCTGCCGTTTGCTTTGTAACGTAATAAATAATGTA
ATGGCATCTATATTCAGTTGAAGTGTGTTGATGTGCATGTGTACTTCCTAAGGTGAAATGCATCTATATACAGAC
AGCCTCTAAATCAAGTCCTTCAGTATAATTGATATATGTTTTATAATTCTCACTGGTATAAGTGTTTCATAT
TTGAAAAAGTTATCTCTGGGTATTGCATAAAAGGCTTCATCTTATAAAGTGAAATCATTGTTATTGAATTTTAGG
AAGGATTAATGGTTAAGTGTATATAAAATACTAATATTAAGTAACTTCATATTGGCCAACACCAGGGTTGTATT
CTATGGATGTCATTATTTTGAATTAAGAATTAGTGTGTTAACATTCCTAAATTGTTTTGAGTGCTTGATTATAATT
TGAAAAAATGTTTATTTTCAATACTCTTTAAATTTAAAAATAAGCTTATATTTCAAATGTC

WO 2004/030615

PCT/US2003/028547

3341/6881
FIGURE 3077

MFSKLAHLQRFAVL SRGVHSSVASATSVATKKTVQGPPTSDDIFEREYKYGAHNYHPLPVALERKGKIYLWDVEG
RKYFDLSSYS AVNQGHCHPKIVNALKSQVDKLTLSRAFYNNVLGEYEEYITKLFNYHKVLPMTGVEAGETAC
KLARKWGYTVKGIQKYKAKIVFAAGNFWGRTL SAISSSTDPTS YDGF GPFMPGFDIIPYNDLPALERALQDPNVA
AFMVEPIQGEAGVVVPDPGYLMGVRELCTR HQVLFIADEIQTGLARTGRWLAVDYENVRPDIVLLGKALSGGLYP
VSAVLCDDDIMLTIKPGEHGSTYGGNPLGCRVAIAALEVLEENLAENADKLGIILRNELMKLP SDVVTAVRGKG
LLNAIVIKETKDWDWKVCLRLRDNGLLAKPTHGDIIRFAPPLVIKEDELRESIEIINKTILSF

WO 2004/030615

PCT/US2003/028547

3342/6881
FIGURE 3078

GCCGCCGCCGCCACACCGGCCCTTCGGGAGCGTCTGAGGAGGCGCGGGCCGCTGCGGGCTCGGGCGCCGACGCGC
GCCGGCCCGAGCCCTGGACGAGGCCACGGAGCCGCTCGCCCCGACCCAGCCGCCGATGTCCTCAAAATGGAG
GCAGCGGGGGCGGCGCGTGAAGAAAGCGGCGCTGTGGGCGGGGAGTAGGGGCCCGGGCGGAGCGGTGGCGGG
ATGGGGCTGCTGCTCATGATCCTGGCGTCGGCCGTGCTGGGTTCCTTCCTCACGCTCCTCGCCAGTTCCTCCTG
CTGTACCGCAGACAGCCCGAGCCGCCGGACGAGGCCGCCCGCGCGGGCGAGGGCTTCGGCTACATCAAGCCA
GTGCCGGGCTGCTCCTAAGGGAGTACCTTTATGGCGGGCGCGGGATGAGGAGCCCTCCGGAGCGGCCCCTGAG
GGCGGCGCGACCCCCACCGCGGCCCGGAGACCCCCGCCCGCGGACGCGGGAGACTTGCTACTTCCTCAACGCC
ACCATCCTATTCTGTTCCGGGAGTTGCGGGACACCGCGCTGACCCGCGCTGGGTACCAAGAAGATCAAGGTG
GAGTTCGAGGAGCTGCTGCAGACCAAGACGGCCGGGCGCTGCTGGAGGGGCTGAGCCTGCGGGACGTGTTCTCTG
GGCGAGACGGTGCCCTTCATCAAGACCATCCGGCTCGTGCGGCCAGTCTGTCCTCGGCCACCGGGGAGCCCGAT
GGCCCTGAAGGGGAGGCGCTGCCCGCGCCTGCCCGAGGAGCTGGCCTTCGAGGCGGAGGTGGAGTACAACGGG
GGCTTCCACCTGGCCATCGACGTGGACCTGGTCTTCGGCAAGTCCGCCTACTTGTTTGTCAAGCTGTCCCGCGTG
GTGGGAAGGCTGCGCTTGGTCTTTACGCGCGTGCCCTTACCCACTGGTTCTTCTCCTTCGTGGAAGACCCGCTG
ATCGACTTCGAGGTGCGCTCCAGTTTGAAGGGCGGCCATGCCCGAGCTCACCTCCATCATCGTCAACCAGCTC
AAGAAGATCATCAAGCGCAAGCACACCCTACCGAATTACAAGATCAGGTTGAATTAATAAAAGGAAATTTACAAA
GTGTTGGACTTACACTTCGTCTTGTCCAGTCAACTGATGGGTATGCTGGGCACGTATCATTGAAACTGTGGCTC
CAAACCTCGCTGCTGCAATTGCAGATCTTCAGCGGGGAGATCGACTTATCGCCATTGGAGGTGTGAAAATCACAT
CAACACTGCAAGTGTTGAAGCTTATCAAGCAGGCTGGTGACCGAGTCCCTGGTGTACTATGAAAGGCCTGTTGGCC
AGAGTAATCAAGGTGCAGTGCTGCAAGATAACTTTGGCCAGTTGGAAGAAAACCTTTTTGTCAAGCTCATGCCAAT
CGGGTTATGAAGAGGAAGCTGCCGGGTTGACAGTAGATACTGAAAGTAGAGAGCTGGATTCTGAATTTGAAGACT
TGGCAAGTGATGTCAGAGCACAAAATGAGTTCAAAGATGAGGCACAATCATTAAAGTCATAGTCCCAAACGTGTTT
CAACAACACTTTCTATTAAACCCCTTGGAGCTATATCACCAGTTTTAAACCGTAAATTAGCTGTAGGAAGTCACC
CACTACCACCGAAAATTGAGTCCAAAGATGGAAATAAACCTCCACCCCTAAAAACTTCTGAGATAACAGACCCAG
CACAAGTGTCAAAACCAACCCAAGGATCTGCTTCAAACCACCTGTGCCACCACGACCACAAGCGAAAGTTTCCTT
TGCCTTCCGCCGATGCTCCAAATCAGGCAGAACCAGATGTTCTCGTTGAAAAGCCAGAGAAGGTGGTGCCACCTC
CTCTTGTAGATAAATCTGCTGAAAAGCAAGCAAAAAATGTGGATGCCATAGACGATGCAGCTGCACCTAAGCAAT
TTTTAGCAAAGCAAGAAGTGGCCAAAGATGTCACCTTCAGAACTTCCTGCCCTACTAAGGACAGTTTCGGACGACC
GTCAAACATGGGAATCATCAGAAATTCCTTATCGTAATAAGCTAGGAAAATGGACAAGAACCAGAGCATCCTGTT
TGTTTGACATAGAAGCCTGTACAGGTACTTAAACATTGCATTGTGGTGCAGGGATCCTTTCAAGTTGGGAGGTC
TCATCTGTTTGGGGCATGTTAGTTTAAACTTGAAGATGTGGCTTAGGATGCCTAGCTACATCAAACACGGAAT
ACCTTTCCAAATTGAGACTGGAAGCCCCCTACCTAAGGCTATAGTCACTAGAACCGCACTACGCAATCTGAGTA
TGCAAAGGGATTCAATGACAAATTTGCTATGGTGACATTACTTCACTTCAAATATTTGAAAGAAGGAGAAT
CAGACCACCATGTAGTTACTAACGT

WO 2004/030615

PCT/US2003/028547

3343/6881
FIGURE 3079

MGLLLMILASAVLGSFLTLLAQFFLLYRRQPEPPADEAARAGEGFRYIKPVPGLLLREYLYGGGRDEEPSGAAP
GGATPTAAPETPAPPTRETCYFLNATILFLFRELRDTALTRRWVTKKIKVEFEELLQTKTAGRLLEGLSLRDVFL
GETVPFIKTIRLVRPVVP SATGEPDGPEGEALPAACPEELAFEA EVEYNGGFHLAIDVDLVFGKSAYLFVKLSRV
VGRRLRVFTRVPFTHWFFSFVEDPLIDFEVRSQFEGRPMPQLTSIIVNQLKKI IKRKHTLPNYKIRLN

WO 2004/030615

PCT/US2003/028547

3344/6881
FIGURE 3080

AATCAAGAGGTTCCAATCTTTGTGTTCACTTTAAGAACACCATGAAACTGCTCAGGCCATCAAGGGTATACATAT
ATGAAAAGCCAAGAAGTATCTGAAAGATGTCACTTTACAGAAACAGTGTGTACCATTCTACGTTACAATGGTGG
AGTTAGCAGGTGTACGCAGGCCAAGCAGTGGGGCTGGACACAAGGTCGGTGGCCCAAAAAGAGTGCTGAATTCTC
TGGTCATTGAGCACATCCAAGTGAACAAAACACCTAAGATGCGCCGCCGACCCACAGAGCTCATGGTCGGATTA
ACCCATACATGAGCTCTCCCTGCCACATTGAGATGATCCTTACGGAAAAGGAACAGATTGTTCTAAATCAGAAG
AGGAGGTTGCCCAGAAGAAAAAGATATCCCAGAAGAACTGAAGAAACAAAACTTATGGCACAGGAGTAAATTC
AGCATTAAATAAATGTAATTAAAAGG

WO 2004/030615

PCT/US2003/028547

3345/6881
FIGURE 3081

MSLYRNSVYHSYVTMVELAGVRRPSSGAGHKVGGPKRVLNSLVIEHIQVNKTPKMRRRTHRAHGRINPYMSSPCH
IEMILTEKEQIVPKSEEEVAQKKKISQKKLKKQKLMAQE

WO 2004/030615

PCT/US2003/028547

3346/6881
FIGURE 3082A

GGCGACTGCTGGCGAGGCGCGTGGGACCTTACGCTGGTTCCCTTCGTCTCCTCTCCCGGCCCGGGCCACTAGAG
AGTTTCGCTGACGCCGGGTGAGCTGAGCCTGCCGCCAAGATGCCGGCCTATTTTCAGAGGCCGGAAAAATGCCCTCA
AACCGCCCAACGAATTTCTTGAGGTTGGCAAAAAGCAGCCTGCTCTGGATGTTCTTTATGATGTTATGAAAAGTA
AAAAACATAGAACATGGCAAAAGATACACGAACCAATTATGTTGAAATACTTGGAACTTTGCGTGGATCTTCGCA
AGAGCCACTTGGCAAAAGGAGGGGTTATACAGTATAAGAACATTTGTCAACAGGTGAACATAAAATCTCTGGAGG
ATGTTGTTAGGGCATAATTTGAAAATGGCAGAGGAAAAAACTGAAGCTGCTAAAGAAGAATCTCAGCAGATGGTCT
TAGATATAGAGGATCTAGATAATATTCAAACCTCCTGAGAGTGTTCCTAAGTCTGTAAGTGGTGAAGACACTC
AGGATCGTACTGACAGATTACTTTTAACTCCATGGGTTAAATTCCTGTGGGAGTCTTACAGGCAGTGTGTTGGACC
TTCTTAGAAACAATTCTAGAGTAGAGCGCCTGTACCATGATATTGCCAGCAAGCTTTCAAATCTGCCTCCAAT
ACACGCGTAAGGCTGAATTCCGTAAACTGTGTGACAATTTGAGAATGCACTTATCGCAGATTACAGCGCCACCATA
ACCAAAGTACGGCAATCAATCTTAATAATCCAGAGAGCCAGTCCATGCAATTTGAAACCAGACTTGTTTCAGCTGG
ACAGTGCATCAGCATGGAATTGTGGCAGGAAGCATTCAAAGCTGTGGAAGATATTCACGGGCTATTCTCCTTGT
CTAAAAAACCACTAAACCTCAGTTGATGGCAAATTACTATAACAAAGTCTCAACTGTGTTTTGGAAATCTGGAA
ATGCTCTTTTTCATGCATCTACACTCCATCGTCTTTACCATCTCTCTAGAGAAATGAGAAAGAATCTCACACAAG
ATGAGATGCAAAGAATGTCTACTAGAGTCCTTTAGCCACTCTTTCCATCCCTATTACTCCTGAGCGTACGGATA
TTGCTCGACTTCTGGATATGGATGGCATTATAGTTGAAAAACAGCGTCGCTTGCAACACTACTAGGTCTTCAAG
CCCCACCGACACGAATTGGCCTTATTAATGATATGGTCAGATTTAATGTACTACAATATGTTGTCCAGAAGTGA
AAGACCTTTACAATTGGCTTGAAGTAGAATTTAACCATTAAAACTCTGTGAGCGAGTCACAAAGGTTCTAAATT
GGGTTAGGGAACAACCTGAAAAGGAACCGGAATTGCAGCAGTATGTGCCACAACCTGCAAAACAACACCATCCTCC
GCCTTCTGCAGCAGGTGTACAGATTTATCAGAGCATTGAGTTTCTCGTTTGAATCTTTTGGTTCTTTTGTG
ATGCTTTCCAACCTGGAACGGGCCATAGTAGATGCAGCCAGGCATTGCGACTTGCAGGTTCTGATTGATCACACTT
CTCGGACCCTGAGTTTTGGATCTGATTGAATTATGCTACTCGAGAAGATGCTCCGATTGGTCTCATTGCAAA
GCATGCCTTCAGAGCAGATAAGAAACCAGCTGCAGCCATGTCTCAGTACTTGCAAAAGCACTTGAAGTCATTA
AACCAGCTCATATACTGCAAGAGAAAGAAGAACAGCATCAGTTGGCTGTCACTGCATACCTTAAAAATTCACGAA
AAGAGCACCAGCGGATCCTGGCTCGCCGCCAGACAATTGAGGAGAGAAAAAGAGCGCCTTGAGAGTCTGAATATTC
AGCGTGAGAAAGAAGAATTGGAACAGAGGGAAGCTGAACCTCCAGAAAGTGCGGAAGGCTGAGGAAGAGAGGCTGC
GCCAGGAAGCAAAGGAGAGAGAGAAGGAGCGTATCTTACAGGAACATGAACAAATCAAAAAGAAAACCTGTCCGAG
AGCGTTTGGAGCAGATCAAGAAAACAGAACTGGGTGCCAAAGCATTCAAAGATATTGATATTGAAGACCTTGAGG
AATTGGATCCAGATTTTATCATGGCTAAACAGGTTGAACAACCTGGAGAAAAGAAAAGAAAGAACTTCAAGAACGCC
TAAAGAATCAAGAAAAGAAGATTGACTATTTTGAAAGAGCCAAACGTTTGGAGAAAATTCCTTTGATAAAGAGCG
CTTACGAGGAACAGAGAATTAAAGACATGGATCTGTGGGAGCAACAAGAGGAAGAAAAGAAATTAACAATGCAGC
TAGAACGTGAAAAGGCTCTTGAACATAAGAATCGAATGTCACGAATGCTTGAAGACAGAGATTTATTCGTAATGC
GACTCAAAGCTGCACGGCAGTCTGTTTATGAGGAAAAACTTAAACAGTTTGAAGAGCGATTAGCAGAAGAAAGGC
ATAATCGATTGGAAGAACGGAAGGAGCGTAAAGAAGAACGCAGGATAACATACTATAGAGAAAAAGAAGAGG
AGGAGCAGAGAAGGGCAGAAGAACAATGCTAAAAGAGCGGGAAGAGAGAGAGCGCGCCGAACGAGCAAAACGCG
AGGAAGAGCTACGAGAGTATCAGGAGCGGGTGAAGAAATTAGAAGAAGTGGAAAGGAAAAAACGCCAAAGGGAGT
TGGAAATTGAAGAACGAGAACGGCGTAGAGAGGAAGAGAGAAGACTTGGCGATAGTTCCTTTCTAGAAAGGACT
CTCGTTGGGGAGATAGAGATTGAGAAGGCACCTGGAGAAAAGGACCTGAAGCAGATTCTGAGTGGAGAAGAGGCC
CGCCAGAGAAGGAGTGGAGACGTGGAGAAGGGCGAGATGAGGACAGGTCTCATAGAAGAGATGAAGAGCGGCCCC
GGCGTCTGGGGGATGATGAAGATAGAGAGCCCTCTCTTAGACCAGACGATGATCGGGTTCCCCGGCGTGGCATGG
ATGATGACAGAGGCCCTAGACGTGGTCTTGAGGAAGATAGGTTCTCTCGTCTGGGGCAGACGATGACCGGCCTT
CCTGGCGTAACACAGATGATGACAGGCCTCCAGACGAATTGCCGATGAAGACAGGGGAACTGGCGTCATGCGG
ATGATGACAGACCACCTAGACGAGGACTGGATGAGGACAGAGGAAGCTGGCGAACAGCTGATGAGGACAGAGGAC
CAAGACGTGGGATGGATGATGACCGGGGGCCGAGGCGAGGAGGCGCTGATGATGAGCGATCATCCTGGCGTAATG
CTGATGATGACCGGGGTCCCAGGCGAGGGTTGGATGATGATCGGGGTCCCAGGCGAGGCATGGATGATGACCGGG
GTCCCAGGCGAGGCATGGATGATGACCGGGGTCCCAGGCGAGGCATGGATGATGACCGGGGTCCCAGGCGAGGGT
TGGATGATGATCGAGGACCTTGGAGGAACGCCGATGATGACAGAATTCCCAGGCGTGGTGACAGGATGACAGGG
GCCCTTGGAGAAACATGGATGATGATCGCCTTTCAAGACGTGCTGATGATGATCGGTTTCCCAGACGGGGTGATG

WO 2004/030615

PCT/US2003/028547

3347/6881
FIGURE 3082B

ACTCAAGACCTGGTCCTTGGAGACCATTAGTCAAGCCAGGTGGATGGAGAGAGAAAAGAAAAAGCCAGAGAGGAGA
GCTGGGGTCCACCTCGAGAATCAAGGCCATCAGAAGAACGTGAATGGGACAGAGAAAAAGAAAGGGACAGAGATA
ATCAAGATCGGGAGGAGAATGACAAGGACCCTGAGAGAGAAAGGGACAGAGAGAGAGATGTGGATCGAGAGGATC
GCTTCAGAAGACCTAGGGATGAAGGTGGCTGGAGAAGAGGACCAGCTGAGGAATCTTCAAGCTGGAGAGACTCAA
GTCGCCGGGACGATAGGGATAGGGATGACCGTCGCCGTGAGAGGGATGACCGGCGTGATCTAAGAGAAAGACGAG
ATCTAAGAGACGACAGGGACCGAAGAGGACCTCCACTCAGATCAGAACGTGAAGAAGTAAGTTCTTGGAGACGTG
CTGATGACAGGAAAGATGACCGGGTGAAGAGCGGGACCCTCCTCGTCGAGTTCCTCCCCAGCTCTTCAAGAG
ACCGAGAAAGAGACCGAGACCGAGAAAGAGAAGGTGAAAAAGAGAAGGCCCATGGAGAGCTGAGAAAGATAGGG
AATCTCTCCGTCGTACTAAAAATGAGACTGATGAAGATGGATGGACCACAGTACGACGTTAAGCTCTCAAGATAAT
GGATTTAAACTGGTGTCTTAAATAGGTTTGATCACATTCAAGGATTATTATACTTGTGCTTCAACCAATCTAAAT
TGGATTCTTTAATGTTGTTTCACCATAACACAAAAAGCATGAACCTGTATTATCCTATATAATAGATTGATCAT
GCACCATATCCACAGGAGGTTGGAAAAACCATGCCATTTCTGGAATTTAAGGGTGTTCATTATTTTCATCAATC
ATTTGTTGACAAAAAGAAAACTAAAAATAAATTTAAATGTGACCCTTCAGGTATTGAGTAACACCTTTATC
TTGGTATAGAACTGATACTTTTTTTTTGATTTTGAAATATCTGATAATAATTTGGAATGAAGTAAGGTTCTGTTA
AAATATATTTGAAGACCCTTTAAAGCAGTGAATCTGAAACAATTTTCACACCCTTAAGTGGTTGATACGTACCTA
TTTTAGGTATTTTGAGGTATTTACCATAAACTAAATTTAGAAATTTTTTAGATTCACTTGAAGTAAACATTACAA
ACATTGGATACGGTGGGGTTTTCTTTAGATTTTACTTGAGAGAAGGTGAGTACAAAGCAATTTGCAGTTGTTGTA
ATGACAAGATTACTGCGCAAGTGTGAATCCAAACAGTATAGCTTTTAAATTTTAAAGCATTGTTGTAATTTATCGC
TGAGTTTTTTTTCTGTTGCCAATAGCAAACCTGCTTTTCCATTAATGGAGAATTCATGCCTTTCAAGCATTTTAAAT
ATGACAATATTTATAAATGTATGGTTTGGAGGAATCGTTTAAATTTCTCTTTCCTAATTTTCTTTTGAAGAT
AGATTCTTTCAACAAGTAATTTGTAGTAATGACTGTGTTGACTTCAATTTTGGAGCGCAGTAGCTATGTTAAAGA
TGAATATTTGGTCTCATTGAAGCCAACACAGAAGTCTGCTGTGTTTTTTCTTCAGTGATAAATAAATACTT
ACAG

PCT/US2003/028547

MPAYFORPENALKRANEFLEVGGKKQPALDVLVDVMSKKKHRTWQKIHEPIMLKYLELCVDLRKSHLAKEGLYQYK
NICQQVNIKSLEDVVRAYLKMAEEKTEAAKEESSQQMVLDIEDLDNIQTPESVLLSAVSGEDTQDRDTRLLLPWV
KFLWESYRQCLDLLRNNRSRVERLYHDIAQQAFKFCLOQYTRKAEFRKLCDNLRMHLSQIQRRHNNQSTAINLNNPES
QSMHLETRLVLQDLSAISMELWQEAFAKVEDIHGLFSLSKKPKPKQLMANYYNKVSTVFWKSGNALFHASTLHRLY
HLSREMRKNLTQDEMQRMRSTRVLLATLSIPITPERTDIARLLDMDGIIVEKQRRLATLLGLQAPPTRIGLINDMV
RFNVLQYVVEVKDLYNWLEVEFNPLKLCERVTKVLNWVREQEKEPELQQYVPLQNNITILRLLQQVSQIYQSI
EFSRLTSLVPFVDAFQLERAIVDAARHCDLQVRIDHSTRLESFSGSDLNYATREDAPIGPHLQSMPSQIQRNQLTA
MSSVLAKALEVIKPAHILQEKEEQHQLAVTAYLKNRSKEHQRI LARRQTI EERKERLESNIQREKEELEQREAE
LQKVRKAEERLRQEAKEREKERILQEHEQIKKKTVRERLEQIKKTELGAFAKDIDIEDLEELDPDFIMAKQVE
QLEKEKKELQERLKNQEKKIDYFERAKRLEEIPLIKSAYEEQRIKMDLWEQQEEERITTMQLEREKALEHKNRM
SRMLEDRDLFVMRLKAARQSVYEEKLKQFEERLAEERHNRLEERKRQRKEERRITYYREKEEEEQRRAEQMLKE
REERERAERAKREEELREYQERVKKLEEVERKKRQRELEIEERERRREEERRLGDSSLSRKDSRWGDRDSEGTWR
KGPEADSEWRRGPPEKEWRRGEGRDERSHRRDEERPRRLGDDEDREPSLRPDDDRVPRRGMDDDRGPARGFEED
RFSRRGADDDRPFSWRNTDDDRPPRIADEDRGNWRHADDDRP RRGLEDREGRSWRTADEDRGPRRGMDDDRGP RR
GGADDERSSWRNADDDRGPRRLGLDDDRGPRRGMDDDRGP RRGMDDDRGP RRGMDDDRGP RRLGLDDRG PWRNADD
DRIPRGAEDDRGPWRNMDDDRLSRRADDDRFPRRGDDSRPGPWRPLVKPGGWREKEKAREESWGP PRESRPSEE
REWDREKERDRDNQDREENDKDPERERDRERDVREDRFRPRRDEGGWRRGPAEESSWRDSSRRDDRDRDRRR
ERDDRRDLRERRDLRDDRRRGPPRLSREEVSSWRRADDRKDDRVEERDPPRRVPPPPALS RDRERDRDRERE
KEKASWRAEKDRESLRRTKNETDEDGWTTVR

WO 2004/030615

PCT/US2003/028547

3349/6881
FIGURE 3084

CTCCACGCGCGGCCTGGCGGGCGGCGGCCACTCTAACCAGCGCAAAATGTCCCTGGAACAGGAGGAGGAAACGCAA
CCTGGGCGGCTCCTAGGACGCAGAGACGCCGTCCCCGCCCTTCATTGAGCCCAACGTGCGCTTCTGGATCACCGAG
CGCCAATCCTTTATTTCGACGATTTCTTCAATGGACAGAATTATTAGATCCTACAAATGTGTTTCATTTTCAGTTGAA
AGTATAGAAAACTCGAGGCAACTATTGTGCACAAATGAAGATGTTTCCAGCCCTGCCTCGGCGGACCAAAGGATA
CAAGAAGCTTGGAAGCGGAGTCTTGCAACAGTGCATCCCGACAGCAGCAACCTGATCCCCAAGCTTTTTTCGACCT
GCAGCGTTCCCTGCCTTTTCATGGCACCCACGGTATTTTTGTCAATGACGCCACTGAAAGGGATCAAGTCCGTGATT
TTACCTCAGGTTTTCTCTGTGCCTACATGGCAGCGTTCAACAGCATCAATGGAAACAGAAGTTACACTTGTAAG
CCACTAGAAAGATCATTACTAATGGCGGGAGCCGTTGCTTCTTCAACTTTCTTAGGAGTAATCCCTCAGTTTGTC
CAGATGAAGTATGGCCTGACTGGCCCTTGGATTAAAAGACTCTTACCTGTGATCTTCCTCGTGCAAGCCAGTGGA
ATGAATGTCTACATGTCCCGAAGTCTTGAATCCATTAAAGGGGATTGCGGTCATGGACAAGGAAGGCAATGTCTG
GGTCATTCCAGAATTGCTGGGACAAAGGCTGTTAGAGAAACGCTAGCATCCAGAATAGTGCTGTTTGGGACCTCA
GCTCTGATTCTGAAGTCTTCACCTACTTTTTTAAAAGGACCCAGTATTTTCAGGAAAAACCCAGGGTCATTGTGG
ATTTTGAACTGTCTTGTACTGTCTGGCAATGGGACTGATGGTGCCATTTCTTTTAGTATATTTCCACAGATT
GGACAGATACAGTACTGTAGTCTTGAAGAGAAAATTCACTCTCCAACAGAAGAAACAGAAATCTTTTATCACAGA
GGGGTGTAGGCGTGAGTTTTAGGTGAATTTATGTGGTTCTGCTTGAAAACCTTCCCCTCTCCAGGTTTCGGTTTA
GAGAACTTTGCCACAGGTCTTCTGGGGTTTTTAAGGCTGGCTGGAGAAGACAGTGGGAGGGTGCCCCGTCTGACA
CCCCTGGGGTTGCTGAGGGAACGGTTGGAGTGGGGATCGGCCTGCGAAAGGATACTGTGAAATCACTAATTAAC
AATAAACCTGTCTCAAGTTGAGGATTTGAAGAAA

WO 2004/030615

PCT/US2003/028547

3350/6881
FIGURE 3085

MSLEQEEETQPGRLLGRRDAVPAFIEPNVRFWITERQSFIRRFLOWTELLDPTNVFISVESIENSRLCTNEDV
SSPASADQRIQEAWKRSLATVHPDSSNLIPKLFRPAAFLPFMAPTVFLSMTPLKGIKSVILPQVFLCAYMAAFNS
INGNRSYTCKPLERSLLMAGAVASSTFLGVIPQFVQMKGTLGPWIKRLLPVIFLVQASGMNVYMSRSLESIKGI
AVMDKEGNVLGHSRIAGTKAVRETLASRIVLFGTSALIPFVFTYFFKRTQYFRKNPGSLWILKLSCTVLAMGLMV
PFSFSIFPQIGQIQYCSLEEKIQSPTEETEIFYHRGV

WO 2004/030615

PCT/US2003/028547

3351/6881
FIGURE 3086

CTGAAGATGCGGGCTGCTGTAGGACGGTTGCTCCGAGCGTCGGTTGCCCCGACATGTGAGTGCCATTCCCTTGGGGC
ATTTCTGCCACTGCAGCCCTCAGGCCTGCTGCATGTGGAAGAACGAGCTTGACAAATTTATTGTGTTCTGGTTCC
AGTCAAGCAAAATTATTACAGCACCAGTTCCTCATGCCATGCACCTGCTGTCACCCAGCATGCACCCATTATTTAAG
GGTACAGCCGTTGTCAATGGAGAGTTCAAAGACCTAAGCCTTGATGACTTTAAGGGGAAATATTGGTGCTTTTC
TTCTATCCTTTGGATTTACCTTTGTGTGTCCTACAGAAATTGTTGCTTTTAGTGACAAAGCTAACGAATTCAC
GACGTGAACCTGTGAAGTTGTGCGAGTCTCAGTGGATTCCCACTTTAGCCATCTTGCCTGGATAAAATACACCAAGA
AAGAATGGTGGTTTGGGCCACATGAACATCGCACTCTTGTGAGACTTAACTAAGCAGATTTCCCGAGACTACGGT
GTGCTGTTAGAAAGTTCTGGTCTTGCACTAAGAGGTCTCTTCATAATTGACCCCAATGGAGTCATCAAGCATTTG
AGCGTCAACGATCTCCAGTGGGCCGAAGCGTGGAAGAAACCCTCCGCTTGGTGAAGGCGTTCCAGTATGTAGAA
ACACATGGAGAAGTCTGCCAGCGAACTGGACACCGGATTCTCCTACGATCAAGCCAAGTCCAGCTGCTTCCAAA
GAGTACTTTTCAGAAGGTAAATCAGTAGATCACCCATGTGTATCTGCACCTTCTCAACTGAGAGAAGAACCACAGT
TGAAACCTGCTTTTATCATTTTCAAGATGGTTATTTGTAGAAGGCAAGGAACCAATTATGCTTGTATTATCATAAGT
ATTACTCTAAATGTTTTGTTTTTGTAAATTCTGGCTAAGACCTTTTAAACATGGTTAGTTGCTAGTACAAGGAATC
CTTTATTGGTAACATCTTGGTGGCTGGCTAGCTAGTTTCTACAGAACATAATTTGCCTCTATAGAAGGCTATTCT
TAGATCATGTCTCAATGGAAACACTCTTCTTTCTTAGCCTTACTTGAATCTTGCCTATAATAAAGTAGAGCAACA
CACATTGAAAGCTTCTGATCAACGGTCTGAAATTTTCATCTTGAATGTCTTTGTATTAACTGAATTTTCTTTT
AAGCTAACAAAGATCATAATTTTCAATGATTAGCCGTGTAACCTCTGCAATGAATGTTTATGTGATTGAAGCAAA
TGTGAATCGTATTATTTTAAAAAGTGGCAGAGTGACTTAACTGATCATGCATGATCCCTCATCCCTGAAATTGAG
TTTATGTAGTCATTTTACTTATTTTATTCATTAGCTAACTTTGTCTATGTATATTTCTAGATATTGATTAGTGTA
ATCGATTATAAAGGATATTTATCAAATCCAGGGATTGCATTTTGAAATTATAATTATTTTCTTTGCTGAAGTATT
CATTGTAAAACATACAAAATAAACATATTTTAAA

WO 2004/030615

PCT/US2003/028547

3352/6881
FIGURE 3087

MAAAVGRLLRASVARHVS AIPWGISATAALRPAACGR TSLTNLLCSGSSQAKLFSTSSSCHAPAVTQHAPYFKGT
AVVNGEFKDLSLDDFKGKYLVLFFYPLDFTFVCPTEIVAFSDKANEFDVNCEVVAVSVDSHFSLAWINTPRKN
GGLGHMNIALLSDLTKQISR DYGVLLGSGGLALRGLFIIDPNGVIKHLVNDLPVGRSVEETLRLVKAFQYVETH
GEVCPANWTPDSPTIKPSPAASKEYFQKVNQ

WO 2004/030615

PCT/US2003/028547

3353/6881
FIGURE 3088

CAGAGGGAGGAAGAAGCGGCGGGCGGGCGGGCGGGCGGGCTCCTCTTTGCAGAGGGGGAACTCTTGGGCT
GAGAGCAGGAATAATGCGGTAGGCAAGGCGGGCTGCTGGCTCCCCGGCTCCGGCAGCAGCGGGCGGACCCGAG
CAGCGGCAGCAGCAGCGGCAGCACCCAGGCGCTGACAGCCCCGCGGGCGGGCTCCGTTGCTGACCGCCGACTGT
CAATGGAGCTGGAAAACATCGTGGCCAACACGGTCTTGCTGAAAGCCAGGGAAGGGGGCGGAGGAAAGCGCAAAG
GGAAAAGCAAGAAGTGGAAAGAAATCCTGAAGTTCCCTCACATTAGCCAGTGTGAAGACCTCCGAAGGACCATAG
ACAGAGATTACTGCAGTTTATGTGACAAGCAGCCAATCGGGAGGCTGCTTTTCCGGCAGTTTGTGAAACCAGGC
CTGGGCTGGAGTGTTACATTAGTTCTGGAATCCGTCGAGCAATATGAAGTTACTCCAGATGAAAACTGGGAG
AGAAAGGGAAGGAAATTATGACCAAGTACCTACCCCCAAAGTCCCCTGTTTTCATAGCCCAAGTTGGCCAAGACC
TGGTCTCCCAGACGGAGGAGAAGCTCCTACAGAAGCCGTGCAAAGAACTCTTTTCTGCCTGTGCACAGTCTGTCC
ACGAGTACCTGAGGGGAGAACCATTCCACGAATATCTGGACAGCATGTTTTTTGACCGCTTTCTCCAGTGAAGT
GTTTGGAAAGGCAACCGGTGACCAAAAACACTTTTCCAGGAGTATCGAGTGTAGGAAAAGGGGGCTTCGGGGAGG
TCTGTGCCTGCCAGGTTCCGGGCCACGGGTAAATGTATGCCTGCAAGCGCTTGGAGAAGAAGAGGATCAAAAAGA
GGAAAGGGGAGTCCATGGCCCTCAATGAGAAGCAGATCCTCGAGAAGGTCAACAGTCAGTTTGTGGTCAACCTGG
CCTATGCCTACGAGACCAAGGATGCACTGTGCTTGGTCTGACCATCATGAATGGGGGTGACCTGAAGTTCCACA
TCTACAACATGGGCAACCTGGCTTCGAGGAGGAGCGGGCCTTGTTTTATGCGGCAGAGATCCTCTGCGGCTTAG
AAGACCTCCACCGTGAGAACACCGTCTACCGAGATCTGAAACCTGAAAACATCCTGTTAGATGATTATGGCCACA
TTAGGATCTCAGACCTGGGCTTGGCTGTGAAGATCCCCGAGGGAGACCTGATCCGCGGCCGGGTGGGCACTGTTG
GCTACATGGCTCCAGAGGTCTGAACAACCAGAGGTACGGCCTGAGCCCCGACTACTGGGGCCTTGGCTGCCTCA
TCTATGAGATGATCGAGGGCCAGTCGCCGTTCCGCGGCCGCAAGGAGAAGGTGAAGCGGGAGGAGGTGGACCGCC
GGGTCTGGAGACGGAGGAGGTGACTCCCAAGTTCTCCGAGGAGGCCAAGTCCATCTGCAAGATGCTGCTCA
CGAAAGATGCGAAGCAGAGGCTGGGCTGCCAGGAGGAGGGGGCTGCAGAGGTCAAGAGACACCCCTTCTTCAGGA
ACATGAACCTCAAGCGCTTAGAAGCCGGGATGTTGGACCTCCCTTCGTTCCAGACCCCCGCGCTGTGTACTGTA
AGGACGTGCTGGACATCGAGCAGTTCTCCACTGTGAAGGGCGTCAATCTGGACCACACAGACGACGACTTCTACT
CCAAGTTCTCCACGGGCTCTGTGTCCATCCCATGGCAAAACGAGATGATAGAAACAGAATGCTTTAAGGAGCTGA
ACGTGTTTGGACCTAATGGTACCCTCCCGCCAGATCTGAACAGAAACCACCTCCGGAACCGCCCAAGAAAGGGC
TGCTCCAGAGACTCTTCAAGCGGCAGCATCAGAACAATTCCAAGAGTTTCGCCCAGCTCCAAGACAGTTTAAACC
ACCACATAAACTCAAACCATGTGAGCTCGAACTCCACCGGAAGCAGCTAGTTTCGGCTCTGGCCTCCAAGTCCAC
AGTGGAAACCAGCCCAGACCCTTCTCCTTAGAAGTGAAGTAGTGGAGCCCCCTGCTCTGGTGGGGCTGCCAGGGGA
GACCCCGGGAGCCGGGGAAGGAGGCCGTCCATCCCGTCGACGTAGAACCTCGAGGTTTCTCAAAGAAATTTCCAC
TCAGGTCTGTTTTCCGAGGCGGCCCGGGCGGGGTGGATTGGATTGTCTTTGGTGAACATTGCAATAGAAATCC
AATTGGATACGACAACCTTGACGATTTTTAATAGCGTCATAACTAGAACTGAATTTTGTCTTTATGATTTTTAAA
GAAAAGTTTTGTAAATTTCTCTACTGTCTCAGTTTACATTTTGTATATTTGTATTTAAATGAAAGTGAGACTTTG
AGGGTGTATATTTTCTGTGCAGCCACTGTTAAGCCATGTGTTCCAAGGCATTTTAGCGGGGAGGGGGTTATCAA
AAAAAAAATGTGACTCAAGACTTCAGAGCCTCAAATGAGAAAATGTCTTTATTAAATGTAGAAAGTGATCCA
TACTTC

WO 2004/030615

PCT/US2003/028547

3354/6881
FIGURE 3089

GCCTGATCGGTTTCCGGTCAGTGGTGTGGTACCGGGTACCCGGAGACGTGTATCGGACGGTGGGCCGAGCCATG

GCCGAGAGAAAACCTAACGGTGGCAGCGGGCGGCCTCCACTTCCTCATCGGGCACTAACTTACTTTTCTCCTCC
TCGGCCACGGAGTTTCACTTCAATGTGCCCTTCATCCAGTCACCCAGGCCTCCGCTTCTCCGGCCTCCCTGCTC
TTACCGGGAGAGGATTCCACAGATGTTGGTGAGGAGGACAGCTTCCTTGGTCAGACTTCTATTACACATCTGCC
CCACAGACATTTAGTTACTTCTCTCAGGTATCAAGCAGCAGTGATCCTTTTGGGAATATTGGACAGTCACCATTA
ACAAGTGCAGCAACCTCAGTTGGACAATCAGGATTCCCCAAGCCCCTGACTGCTCTCCCTTTTACAAGTGGATCC
CAAGATGTCTCGAATGCATTTTACCATCCATTTTGAAGGCTCAACCTGGTGTCTCCACCTTCTCTACTGATGGGA
ATAAATTCTTATCTGCCTTCTCAGCCAAGTAGTCTCCCTCCTTCATATTTTGGGAACCAACCCCAAGGAATTCCC
CAACCAGGATACAATCCATATCGCCATACCCCTGGCAGCAGCAGGGCTAATCCTTACATTGCACCACCCAGCTG
CAGCAGTGCCAAACACAGGCCCTCCTGCTCATCTCCACCTTCTGGACCCCCTGTTTCAGATGTACCAGATGCCT
CCAGGATCTTTGCCACCGGTTCTTCTTCACTGTCAGTCACCGGCACAGCAGCAGGTACCTGCCAGACCTGGGGCT
CCCTCTGTTCAAGTGCCATCTCTTTTCTACTTCAAACCAATATGAGCCTGTTTCAGCCCCACTGGTTTTACTGC
AAGGAGGTAGAATACAAACAAGTGTGGATGCCTTTTAGTGTGTTTGCAGCTCTTTGAATCTTGAAGAAATCTATAAT
TCAGTTTCAGCCAGATCCGAGAGCGTGTTTCTTGGCACGGATGGAGGGCGCTACGATGTTTACCTCTATGACCGA
ATAAGGAAGGCTGCCTACTGGGAAGAGGAGCCAGCCGAAGTGAGACGCTGTACTTGGTTTTACAAGGGGGACACA
GATAGTCGATTTATTCCTATACTGAGGAGTTTCACTGAAAAACTAGAGGCTGAATATAAAAAAGCTGTAAACCACT
AATCAGTGGCACCAGGATTAGAGTTTCCAAGTGGAGAGACAATTGTTATGCACAATCCAAAGGTTATTGTTTCAG
TTCCAGCCCTCCTCAGTGCCAGATGAATGGGGCACCACGCAAGATGGACAGACAAGGCCAGGGTTGTAAAGCGT
GGAATTGATGATAACCTTGATGAAATTCCTGACGGGGAGATGCCTCAAGTTGACCATTTGGTGTGTTGGTGTGAT
GGCATTGGACCTGTGTGTGACTTACGCTTTAGGAGCATTATTGAGTGTGTGGATGATTTTAGGGTGGTTTTCTCTC
AAATTGCTGCGGACACATTTCAAGAAATCTTTAGATGACGGGAAAGTAAGCAGAGTGGAGTTTCTTCCAGTTTCT
TGGCATAGTTCTTTGGGTGGGGACGCCACAGGTGTGGACAGGAATATTAAGAAAATCACTTTGCCAAGTATTGGT
CGATTTCTGTCATTTACCAATGAACTTTGCTAGATATTTTATTTTATAACAGCCCCACCTACTGTGACACAATT
GTGGAAAAAGTAGGAATGGAGATAAACCATCTGCATGCACTCTTTATGAGTCGGAACCCAGACTTCAAAGGAGGT
GTCTCTGTTGCTGGTCACAGTTTAGGTTCTTTAATATTGTTTGACATCCTGTCTAATCAAAAAGATTTGAATTTA
TCAAAGTGCCCTGGACCTTGTGCTGTTGCTAATGGAGTTGTGAAGCAGCTACATTTTCAGGAAAAGCAGATGCCT
GAAGAGCCAAAGCTGACTTTGGATGAGTCGTATGACCTTGTGTTGAAAATAAAGAAGTCTTAACCTTTGCAAGAA
ACTCTGGAAGCACTTAGCCTCTCTGAATATTTTAGCACTTTTGAAGGAAAAGATTGATATGGAGTCCCTGCTT
ATGTGTACAGTTGATGACCTGAAGGAAATGGGGATACCCCTTGGACCCAGAAAGAAGATAGCTAACCTTTGTAGAA
CATAAAGCAGCCAACTGAAAAAAGCAGCGTCAGAAAAGAAGGCAGTGGCGGCCACTTCTACAAAAGGACAAAGAG
CAAAGTGCCCAAGACTAAAGACATGGCTTCCCTCCCTCAGAAATCCAATGAGCCAAAGAGGAACTTCCAGTT
GGTGCTTGCGTGTCTTCTGTGTGTGTAATTATGAATCTTTTGAAGTTGGCGCCGGACAGGTTTCTGTTGCTTAC
AACTCATTAGATTTTGAACCAGAGATATTCTTTGCCTTGGGGTCTCCAATTGCTATGTTTCTCACTATTTCAGGA
GTTGATAGGATAGATGAGAATTACAGCCTTCCCTACCTGTAAAGGGTCTTCAATATTTATCATCCGCTTGATCCA
GTGGCATATAGATTAGAACCCTATGATTGTTCCAGATTGGACCTAAAAGCTGTCTCATTCCACATCACAAAGGC
AGAAAAAGACTTCATTTAGAATTGAAAGAGAGTCTCTCTCGTATGGGATCTGATTTGAAGCAGGGTTTTATTAGC
TCTCTCAAAGTGCTTGGCAGACATTAATGAGTTTGCCCGTGCTCATACGCTTCAACCCAGTTGCAAGAAGAA
TTGGAGAAGGTGGCCAATCAGATCAAAGAAGAAGAAAAGCAAGTAGTTGAAGCAGAAAAGGTTGTTGAAAGT
CCAGATTTTCCAAGGATGAGGACTACTTAGGAAAGGTTGGAATGTTAAATGGAGGCCGCCGAATTGACTACGTT
CTCCAAGAAAAACCAATAGAGAGTTTTAATGAATACCTTTTCGCTCTTCAGAGTCACTTATGCTATTGGGAATCT
GAAGATACTGCTCTGTTACTACTTAAAGAAATTTATCGAACAATGAACATTAGTCCAGAACAGCCCCAGCATGGA
TCAAACCTTCAGTT

WO 2004/030615

PCT/US2003/028547

3355/6881
FIGURE 3090

MAERKPNGGSGGASTSSSGTNLLFSSSATEFSFNVPFIPVTQASASPASLLLPGEDSTDVGEEDSFLGQTSIHST
APQTFSYFSQVSSSSDPFGNIGQSPLTTAATSVGQSGFPKPLTALPFTTGSQDVSNAFSPSISKAQPGAPPSSLM
GINSYLPSQPSSLPPSYFGNQPGQIPQPGYNPYRHTPGSSSRANPYIAPPQLQQCQTPGPPAHPPPSGPPVQMYQM
PPGSLPPVPSSVQSPAQQQVPARPGAPSVQVPSPFLLQNQYEPVQPHWFYCKEVEYKQLWMPFSVFDLSNLEEIY
NSVQPDPEESVVLGTDGGRYDVYLYDRIRKAAWEEPAEVRRCTWIFYKGDTSRFPYTEEFSEKLEAEYKKAVT
TNQWHRRLEFPSETIVMHNPKVIVQFQPSVPDEWGTQDGGQTRPRVVKRGIDDLNDEIPDGEMPQVDHLVFFV
HGIGPVCDLRFRSIIIECVDDFRVVSLLKLLRTHFKKSLDDGKVSVEFLPVHWHSSLGGDATGVDRNIKKITLPSI
GRFRHFTNETLLDILFYNSPTYCQTIVEKVGMEINHLHALFMSRNPDKGGVSVAGHSLGSLILFDILSNQKDLN
LSKCPGPLAVANGVVKQLHFQEKQMPEEPKLTLDSEYDLVVENKEVLTTLQETLEALSLEYFSTFEKEKIDMESL
LMCTVDDLKEMGIPLGPRKKIANFVEHKAALKKAASEKKAVAATSTKGQEQSAQKTKDMASLPSESNEPKRKLP
VGACVSSVCVNYESFEVGAGQVSVAYNSLDFEPEIFFALGSPIAMFLTIRGVDRIDENYSLPTCKGFFNIYHPLD
PVAYRLEPMIVPDLDLKAFLIPHHKGRKRLHLELKESSLRMGSDLKQGFISLKSAAWQTLNEFARAHTSSTQLQE
ELEKVANQIKEEEEKQVVEAEKVVEPDFSKDEDYLGKVGMLNGGRRIDYVLQEKPIESFNEYLFALQSHLCYWE
SEDTALLLLKEIYRTMNISPEQPQH

WO 2004/030615

PCT/US2003/028547

3356/6881
FIGURE 3091

GAACCGCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTGTTCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATG
TGCGTATTGAGCACATTAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGTGTGAAGGAAAATGATCAGAAAA
AGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTTG
TGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCTATGAATTCATGGCATATAGGTGTTAAAAA
AAAAAATAAAGGACCTCTGGGCTACAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3357/6881
FIGURE 3092

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKGDIVDIKMGTVQKGMPhKCYHGKTGRVYNVTQHAVGIV
V NKQVKGKILAKRINVRIEHIKHSKSRDSFLKRVKENDQKKKEAKEKGTWVQLKRQPAPPREAHFVRTNGKEPEL
LEPIPYEFMA

WO 2004/030615

PCT/US2003/028547

3358/6881
FIGURE 3093

GAAGCAAGGAGGCGGCGGCGGCCGAGCGAGTGGCGAGTAGTGGAAACGTTGCTTCTGAGGGGAGCCCAAGATGAC
CGGTTCTAACGAGTTCAAGCTGAACCAGCCACCCGAGGATGGCATCTCCTCCGTGAAGTTCAGCCCCAACACCTC
CCAGTTTCTGCTTGTCTCCTCCTGGGACACGTCCGTGCGTCTCTACGATGTGCCGGCCAACATCCATGCGGCTCAA
GTACCAGCACACCGGCGCCGTCCTGGACTGCGCCTTCTACGATCCAACGCATGCCTGGAGTGGAGGACTAGATCA
TCAATTGAAAAATGCATGATTTGAACACTGATCAAGAAAATCTTGTGGGACCCATGATGCCCTTATCAGATGTGT
TGAATACTGTCCAGAAGTGAATGTGATGGTCACTGGAAGTTGGGATCAGACAGTTAACTGTGGGATCCCAGAAC
TCCTTGTAATGCTGGGACCTTCTCTCAGCCTGAAAAGGTATATACCCTCTCAGTGTCTGGAGACCGGCTGATTGT
GGGAACAGCAGGCGCGAGAGTGTGGTGTGGGACTTACGGAACATGGGTTACGTGCAGCAGCGCAGGGAGTCCAG
CCTGAAATACCAGACTCGCTGCATACGAGCGTTTCCAAACAAGCAGGGTTATGTATTAAGCTCTATTGAAGGCCG
AGTGGCAGTTGAGTATTTGGACCCAAGCCCTGAGGTACAGAAGAAGAAGTATGCCTTCAAATGTCACAGACTAAA
AGAAAAATAATATTGAGCAGATTTACCCAGTCAATGCCATTTCTTTTACAATATCCACAATACATTTGCCACAGG
TGGTCTGATGGCTTTGTAAATATTTGGGATCCATTTAACAAAAAGCGACTGTGCCAATTCATCGGTACCCAC
GAGCATCGCATCACTTGCCCTTCAGTAATGATGGGACTACGCTTGCAATAGCGTCATCATATATGTATGAAATGGA
TGACACAGAACATCCTGAAGATGGTATCTTCATTGCGCAAGTGACAGATGCAGAAACAAAACCCAAGTCACCATG
TACTTGAACAAGATTTCACTTAACTTAAGTGCCATGTTGATGATAATAAAACAATTCGTACTCCCAATGGTGGATT
TATTACTATTAAAGAAACCAGGGAAAATATTAATTTTAATATTATAACAACCTGAAAATAATGAAAAGAGGTTT
TTGAATTTTTTTTTTTAAATAAACACCTTCTTAAGTGCATGAGATGGTTTGATGGTTTGCTGCATTAAAGGTATT
TGGGCAACAAAATTGGAGGGCAAGTGACTGCAGTTTTGAGAATCAGTTTTGACCTTGATGATTTTTTGTTCCTCA
CTGTGGAATAAATGTTTGTAAATAAGTGAATAAAAAATCCCTTTGCATTCTTTCTGGACCTTAAATGGTAGAGG
AAAAGGCTCGTGAGCCATTTGTTTCTTTTGCTGGTTATAGTTGCTAATTCTAAAGCTGCTTCAGACTGCTTCATG
AGGAGGTTAATCTACAATTAAACAATATTTCTCTTGCCGTCCATTATTTTCTGAAGCAGATGGTTCATCATTT
CCTGGGCTGTTAAACAAAGCGAGGTTAAGGTAGACTCTTGGAATCAGCTAGTTTTCAATCTTATTAGGGTGCA
GAAGGAAAACATAAGAAAACCTCCTAATATCATTTTGTGACTGTAAACAATTATTTATTAGCAACAATTGAT
CCCAGAAGGGCAAATTTGTTTGAGTCAGTAATGAGCTGAGAAAAGACAGAGCATATCTGTGTATTTGGAAAAATA
TTGTAACGTAATTGCAGTGCATTTAGACAGGCATCTATTTGGACCTGTTTCTATCTCTAAATGAATTTTTTGAAA
CATTAAATGAGGTTTACATATTTCTCTGACATTTATATAGTTCTTATGTCCATTTAGTTGACCCGCTGGTGA
TTAAAGTTAAAAAGAAAAAATTATAGTGAGAAATGAGATTCATTTCAATGTAATGCACTAAAGCAGAACACGAAC
TTAGCTTGGCCTATTCTAGGTAGTTCCAAATAGTATTTTGTGTCAAACTTTAAATTTATATTAATTTGCAAA
TGTATGTCTCTGAGTAGGACTTGGACCTTTCTGAGATTTATTTTATCCGTGATGATTTTTTTTAATTCCTTTG
ATACAGAGAAGGGTCTTTTTTTTTTTTAAGTATTTAGTGAAAACTTGGTGTAAAGTCTGAACCATCTTTGAAAT
GTATTTTCTTCATTGCAGGTCCACCTAATCATCTGTGAAAGTGGTTTCTCTATGGAAAGCTTTGTTTGCTTCCT
ACAAATACATGCTTATTCCTTAAGGGATGTGTTAGAGTTACTGTGGATTTCTCTGTTTCTGTCTTACAAGAAAC
TTGTCTATGTACCTTAATACTTTGTTTAGGATGAGGAGTCTTTGTGTCCCTGTACAGTAGTCTGACGTATTTCCC
CTTCTGTCCCTAGTAAGCCAGTTGCTGTATCTGAACAGTTTGAGCTCTTTTGTAAATATACTCTAAACCTGTT
ATTTCTGTGCTAATAAACGAGATGCAGAACCTTGAAAAA

WO 2004/030615

PCT/US2003/028547

3359/6881
FIGURE 3094

MTGSNEFKLNQPPEDGISSVKFSPNTSQFLLVSSWDTSVRLYDVPANSMRLKYQHTGAVLDCAFYDPTHAWSGGL
DHQLKMHDNLNTDQENLVGTHDAPIRCVEYCPEVNVMTGSDQTVKLWDPRTPCNAGTFSQPEKVYTLSVSGDRL
IVGTAGRRVLVWDLRNMGYVQQRRESSLKYQTRCIRAFPNKQGYVLSSIEGRVAVEYLDPSPEVQKKKYAFKCHR
LKENNIEQIYPVNAISFHNIHNTFATGGSDGFVNIWDPFNKKRLCQFHRYPTSIASLAFSNDGTTLAIASSYME
MDDTEHPEDGIFIRQVTDATKPKSPCT

WO 2004/030615

PCT/US2003/028547

3360/6881
FIGURE 3095

ATTTTCCACGCTGTACCGGCGGAAATTCAAGCACTGGAAGAGAGGTTCCGGGGCTGGGCTGGCCTGACTGAAGGC
GGCGGAATGGAGACGCGGACCGAGGACGGGGGCCTCACCCGCCGCCCCACGCTGGCCTCTTCTTGGGATGTTGCA
GGCGGGGCCCTGACCCACAGCCTCCTCCTCACCCGGGCGGTCTCGGCCCCGGTGACTTCGACTGGGAGGAGCTG
CTGGCACC GCCTGCTCCAGGT CAGGATCTGGTGATTTTGAAGAGAAACCACAACGACAAAGATGAAAACCCCTGC
TTCCTTTACCTGAGGTGTGGCCCTGATGGAGGTGAAGAAATCGCTTCTATTGGCATTTTAAGTTCAGCAAGAAAT
ATGGAAGTGTA CTTAGGAGAGGAGTACTGTGGAACCAGTAGGGGCAAGAATGTTTGTACTGTCCTGGATGACAGT
GAACATGAAAAGATCATT TTTGTATAAAAAAATCTAAAATTGGAGTCTCCACACATGCTTGTAATAATAAGTTG
CTCTCCTTTGGCGAAAGGCAGTGTGTGTTTCATCAGTAAAGTTGTGGTACACATGAGATCAGTTTTTGCAAATCT
TCAACAAGCTCTCCTGCTCTAGGATCAAGGATAGACCTTGACAAGGTCCAAACCATAATGGAGTCCATGGGGTCA
AAGTTATCTCCTGGAGCTCAGCAGTTGATGGATATGGTTAGGTGTCAGCAGCGGAATTGTATCCCATTGGAGAG
CAGCTTCAGTCGGTGTGGGCAATTCTGGATAACAAGCATATGATTGGACTACAATCCTCATCTACCTTAGGAACC
TTAAACAAGTCGCTCTCCACACCTTTTCTTTTAGAACTGGATTGACATCTGGGAACGTGACTGAAAACCTTACAA
ACTTACATTGATAAAAGTACACAACCTGCCTGGTGGAGAGAATTCTACCAAGCTTGATGAGTGTAAAGTTATGCCT
CAAAACCATTCTTTCTTGAATATGATCTTAAAAATGCAATGGCCTCTTTCTTACCAAAGAAAGTAAGTGACAAC
TCAAAATATACCAACTCCGAGTTGCTGCCTTTTCTCCAGAATTTATGTAGTCAAGTTAATCATCTCCATGTGGGA
AATAAGACCGAGTGTCAGGAAAACATACCAAGCATGGTGAACGCATTCTTGGTGTGGAAATGGAAGAGCAATCT
ATTTGCTCTACTTGGAAAAGATTCTTTCTAAAAATATGGAAGTATGGAAGAAAGAACTTATGGATTACATTGAT
CAGCGAATACATGAACTCCAGGAGCACATTGATGATAAGATTGCTTTGTTACTGGATTGCTGCAAAATCCTAAC
TCCCCGCCCACTGGGATACCTCTAAGACATTATGACTCTGGAGAAAGACTTTCAAATGGAGAAAGATAAGCTCTC
AACATAAACAGTGTACTGCAGATATTTATTACATATTTATTACAAAGCCAAAACCCAAAATATTTATAAAAGC
AAGTATTTAATGTCTTTGAGGGATCATTGTCTTACACAAAGTGACCTCAGTTTTTCGTTTTTACTACACTTGTTA
TTTTAAATCCAGTACTGTACTGAGTTAATATGATACAGTCAAATTATTTTTGCTCACGATATTTTTTCACTCTT
ACAGAAATGTATGTATATTTGTGTTAAGAGTTTAAAAATGCTTGAGGATTTCTAATACAGTTCATTAGTTTGTATT
GTATATGTGTTAAGTATAATTTTATTTATACAAAGATCTTATAGTCTTAGAAGTATGAAAAATAATGCTTAAG
AGTATTTGATTTTTTCTTTTCTAATTATCTTGGAAAATTGGATACTTAAGACTTGGAGCCTTTACTTCAGATT
ACCAGTTTACATTTTGTATTGCTTGTGTGAGATAATGAATAAGATGTGATATTTGGCATGTGTAACTTAGTTCA
CTCTGGGGTTGTTAATATATTTTGTTCATTACAGAGTAGCTGTAGGTAGGAAAGTAAACATCAGAACTAGCCTA
GTCCTTGTACGATTAGTACTTTGGATTTGATTTTTCTGTAAAACAGATGCAGTCATCTTGTGTGACCTCAGTA
ACCCAGACAGTTTAAAGAAAACCTCTCCTTTTGGAGCTGTACAGGTTTTTTCCCGAGAATCCTTTTCTGGCATGT
TTATTGTATGAAATAATGAGGCTCTCCATGGAAGGATGAACACATATGAGTCAAGGGATTGCAATTCTCTCTGAT
AGACTTAGTTTTTCAGACCTTATAACTATTGTATATGCATTGAAGGGTGATATATTTGCATATAAAAAATAAACGCA
CCTGCTCTGGG

WO 2004/030615

PCT/US2003/028547

3361/6881
FIGURE 3096

METRTEGGGLTRRPTLASSWDVAGGALTHSLLLTRAGLGPGDFDWEELLAPPAPGQDLVILKRNHNDKDENPCFL
YLRCGPDGGEEIASIGILSSARNMEVYLGEYCGTSRGKNVCTVLDSEHEKIILYKKNLKLESSTHACKIKLLS
FGERQCVFISKVVVHMRSVFANSSTSSPALGSRIDLDKVQTIMESMGSKLSPGAQQLMDMVRCQQRNCIPIGEQL
QSVLGNSGYKHMIGLQSSSTLGTLNKSSSTPFPFRTGLTSGNVTENLQTYIDKSTQLPGGENSTKLDECKVMPQN
HSFLENDLKNAMASFLPKKVS DNSNIPNSELLPFLQNLCSQVNHHLVGNKTECQENITKHGERILGVGMEEQSIC
SYLEKILSKNMELMEKKLMDYIDQRIHELQEHIDDKIALLLDLLQNPNSPPTGIPLRHYDSGERLSNGER

WO 2004/030615

PCT/US2003/028547

3362/6881
FIGURE 3097

GTGAGCGGCAACATGGCGTCCAGGTCTAAGCGGCGTGCCGTGGAAAGTGGGGTTCCGCAGCCGCCGGATCCCCCA
GTCCAGCGCGACGAGGAAGAGGAAAAAGAAGTCGAAAATGAGGATGAAGACGATGATGACAGTGACAAGGAAAAG
GATGAAGAGGACGAGGTCATTGACGAGGAAGTGAATATTGAATTTGAAGCTTATTCCTATCAGATAATGATTAT
GACGGAATTAAGAAATTACTGCAGCAGCTTTTTCTAAAGGCTCCTGTGAACACTGCAGAACTAACAGATCTCTTA
ATTCAACAGAACCATATTGGGAGTGTGATTAAGCAAACGGATGTTTCAGAAGACAGCAATGATGATATGGATGAA
GATGAGGTTTTTGGTTTCATAAGCCTTTTAAATTTAACTGAAAGAAAGGGTACCCAGTGTGTTGAACAAATTCAA
GAGTTGGTTCTACGCTTCTGTGAGAAGAACTGTGAAAAGAGCATGGTTGAACAGCTGGACAAGTTTTTAAATGAC
ACCACCAAGCCTGTGGGCCTTCTCCTAAGTGAAAGATTCATTAATGTCCCTCCACAGATCGCTCTGCCCATGTAC
CAGCAGCTTCAGAAAGAACTGGCGGGGGCACACAGAACCAATAAGCCATGTGGGAAGTGCTACTTTTACCTTCTG
ATTAGTAAGACATTTGTGGAAGCAGGAAAAACAATTCCAAAAAGAAACCTAGCAACAAAAAGAAAGCTGCGTTA
ATGTTTGCAAATGCAGAGGAAGAATTTTTCTATGAGGAGCAGGGAAAACCTGAGGTGCTTGGAGGTCCAGACACA
AGAAGAGGATTGGAACCAAGTTCGATACAGCACAAATGGTGGTTCACGGGGGCAAGTGACAGCCCTGGTTTCTCTG
AAGGCTGGACTAATTCAATCAAGATCAACTCTAAGTGATTTCCAGGGAACCTTCATGACTGTTGGAATTGCTCTG
TCATAATAAGTCAGGGATATTTAGGAGGCTCATAGTCTCCTGGAGGGATAAAACATCTCGGCACCTAGTAATGGT
AAATTAGTCAATATTTGTTAGTTTCGTTTGAGATCTCAAATGTTAGGATTTTCTGAAGTCTCAGTGTCTTTCAGA
GTTTGAGATACCTTGTTTTCATTTTTTCTAATTTTTAATTTAAAGTAATAAAGAATATTTTGTAAATGATTAGGA
TGAAAATTTTATCGTCAATTATAAGCCAAAATTTGCTAAAATTAAAGTCAGTATACTTGGAACCAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3363/6881
FIGURE 3098

MASRSKRRAVESGVPQPPDPPVQRDEEEKEVENEDDDSDKEKDEEDEVIDEEVNIEFEAYSLSNDYDGIK
KLLQQLFLKAPVNTAELTDLLIQQNHIGSVIKQTDVSEDSNDDMDEDEVFGFISLLNLTERKGTQCVEQIQELVL
RFCEKNCEKSMVEQLDKFLNDTTKPVGLLLSERFINVPPQIALPMYQQLQKELAGAHRTNKPCGKCYFYLLISK
FVEAGKNNSSKKKPSNKKKAALMFANAEFFYEEQGKPEVLGGPDTRRGLEPVPIQHNGGSRGQVTALVSLKAGL
IQRSTLSDFQGTFTVGIALS

WO 2004/030615

PCT/US2003/028547

3364/6881
FIGURE 3099

GCGGAGCGAGCCCTGAAAGGCTATAGGCGAGGGGGCGGCTCCGCGGGGCCGGGCGAGGAGTCCAGAGAGCCATGG
CCGCCCTGCGTGTCTGCTGTCTGCGCCCCGCGGCCCGCTGAGGCCCCCGGTTTCGCTGTCCCGCCTGGCGTCCCT
TCGCCTCGGGTGCTAACTTTGAGTACATCATCGCAGAAAAAGAGGGAAGAATAACACCGTGGGGTTGATCCAAC
TGAACCGCCCCAAGGCCCTCAATGCACCTTTGCGATGGCCTGATTGACGAGCTCAACCAGGCCCTGAAGATCTTCG
AGGAGGACCCGGCCGTGGGGGCCATTGTCTCACCGGCGGGGATAAGGCCTTTGCAGCTGGAGCTGATATCAAGG
AAATGCAGAACCTGAGTTTCCAGGACTGTTACTCCAGCAAGTTCTTGAAGCACTGGGACCACCTCACCCAGGTCA
AGAAGCCAGTCATCGCTGCTGTCAATGGCTATGCCTTTGGCGGGGGCTGTGAGCTTGCCATGATGTGTGATATCA
TCTATGCCGGTGAGAAGGCCAGTTTGCACAGCCGAGATCTTAATAGGAACCATCCCAGGTGCGGGCGGCACCC
AGAGACTCACCCGTGCTGTTGGGAAGTCGCTGGCGATGGAGATGGTCCTCACCGGTGACCGGATCTCAGCCCAGG
ACGCCAAGCAAGCAGGTCTTGTGAGCAAGATTTGTCTGTTGAGACACTGGTGGAAGAAGCCATCCAGTGTGCAG
AAAAAATTGCCAGCAATTCTAAAATTGTAGTAGCGATGGCCAAAGAATCAGTGAATGCAGCTTTTGAAATGACAT
TAACAGAAGGAAGTAAGTTGGAGAAGAACTCTTTTATTCAACCTTTGCCACTGATGACCGGAAAGAAGGGATGA
CCGCGTTTGTGGAAAAGAGAAAGGCCAACTTCAAAGACCAGTGAGAACCAGCTGCCCCCTGCTTCACACCTCTGCT
TGGAGAGGACAAGTGCAGCCTGTCAGTTTTAGAAGCAAGTAAATCATCCTCTTTTCAAGAGCAGTGTCCGTGGTG
TGCAGTTCCTCTCCAATTGCTGCGTGGTTCGTGGCCCGACCTCTCACGGCATGACAGCCTTCGTACCCAGCCTGT
GAGGGTCCCTGACTGGAGCACCTTCTAAATCTAAGATTCTGCTGAGGAGCCCCCGCTGGTCCCTCTGGGCATGCTG
TGCTCGGACGGAAAGCGGGGCCTGCGGGTCCTTGTGTCCCTGCCGCTGAAGAATGGGGCTGCTCTGAGGGAAACG
CTGTCTGCTGCCTTCATACAGATGCTGATTAAAGTGATAGCGATTGAGATT

WO 2004/030615

PCT/US2003/028547

3365/6881
FIGURE 3100

MAALRVLLSCARGPLRPPVRCPAWRPFASGANFEYIIAEKRGKNNTVGLIQLNRPKALNALCDGLIDELNQALKI
FEEDPAVGAIIVLTGGDKAFAAGADIKEMQNLSFQDCYSSKFLKHWDHLTQVKKPVIAAVNGYAFGGGCELAMMCD
IIYAGEKAQFAQPEILIGTIPGAGGTQRLTRAVGKSLAMEMVLTGDRISAQDAKQAGLVSKICPVETLVEEAIQC
AEKIASNSKIVVAMAKESVNAAFEMTLTEGSKLEKKLFYSTFATDDRKEGMTAFVEKRKANFKDQ

WO 2004/030615

PCT/US2003/028547

3366/6881
FIGURE 3101

GGCGGAAGTGGCTCCGGGACTGCGGAGAACATATTGTGATGTTTCGTGCCTCAGAGCTAAACTATGAGTGAATTT
CGGATTACCATGACGTCAATGAACTGCTTAGCCTGCTGCGTGTCCACGGAGGAGATGGGGCTGAGGTCTACATT
GACCTGCTTCAAAAAGAACAGGAACCCGTACGTCACTACCCTGTCTCTGCTCACAGTGCCAAGGTTAAAAATTGCA
GAGTTTTCTCGTACTCCAGAAGACTTTCTAAAGAAATATGATGAACTGAAATCTAAAAATACAAGGAACCTTGAC
CCGCTGGTGTACCTGTTGTCAAAGCTCACGGAAGACAAAGAGACTCTGCAGTACTTACAACAGAATGCAAAAAGAA
AGAGCTGAGCTTGACGCCGTGCTGTGGGACAGCAGTACCACCAGCATCAACGTCCCTGCCGCGGCCTCCAAGATC
TCCATGCAGGAGCTTGAGGAAGTGAAGGAGCAGCTTGGCAGCGTGGCCACAGGCTCCACGCTGCAGCAGTCTCTG
GAACTTAAAGAAAGATGCTTCGAGACAAGCAGAACAAAAAATTCAGGCCAGCACCTCCCCATCTTCCCAGCA
TGGGTGTATGAGAGACCTGCCCTGATCGGGGATTTCTTGATTGGTGTGGCATCAGCACAGACACCGCTTTGCCG
ATAGGCACGTTGCCCCCTGGCCTCGCAGGAGTGGCCGCTGGTGGAGGACCTGCTGTACGTGCTGGTGGGCGTGGAC
GGGAGGTACGTACGTGCTCAGCCCCCTGGCTGGGAGGCAGAGCCGGACCTTCCTCGTGGACCCCAACCTGGACCTG
TCCATCAGGGAGCTGGTGCACAGGATCCTCCCAGTGGCCGCCAGCTACTCCGCTGTGACCAGGTTTATTGAAGAG
AAGTCTTCTTTCGAGTACGGGACAGGTGAACCACGCCCTGGCGGCCGCCATGCGCACCTTGGTGAAGGAGCACCTG
ATTCTGGTGTACAGCTGGAGCAGCTGCACAGGCAGGGCTTCCTTCGCTGCAGAAGCTCTGGTTCTACATCCAG
CCAGCCATGCGCACCATGGACATCCTGGCCTCCCTCGCCACCTCGGTGGACAAAGGCGAATGTCTTGGGGGGTCC
ACGCTGAGCCTGCTCCACGACAGGAGCTTCAGCTACACAGGGGACAGCCAGGCGCAGGAGCTATGCCTGTACCTA
ACCAAGGCGGCCAGTGCTCCCTACTTCGAGGTTCTGGAGAAGTGGATCTACAGGGGCATCATCCACGACCCATAC
AGTGAGTTTATGGTCGAGGAGCAGCAGCTGCGGAAGGAGAGGATCCAGGAGGATTACAACGACAAGTACTGGGAC
CAGCGGTACACCATCGTCCAGCAGCAGATCCCGTCTTCCTGCAGAAAATGGCGGACAAGATCCTCAGCACAGGA
AAATATCTAAATGTGGTCAGAGAGTGTGGCCATGACGTACCTGCCCGTGGCTAAAGAGATCATCTACACGTTA
AAAGAGCGGGCGTATGTGGAGCAGATCGAGAAGGCGTTTAACTACGCCAGCAAGGTGCTGCTGGACTTCCTGATG
GAGGAGAAGGAGCTGGTGGCTCACCTCAGGTCCATCAAGCGCTACTTCTCATGGACCAGGGGCGACTTCTTCGTG
CACTTCATGGACCTCGCGGAGGAGGAGCTCCGGAAGCCGGTGGAGGACATCACGCCCCCTCGCCTGGAAGCGCTC
CTGGAGCTGGCGCTGCGCATGAGCACGGCCAACACTGACCCCTTCAAGGACGACCTCAAGATCGACCTGATGCCC
CATGACCTCATCACTCAGCTCTTGCGCGTCTTGCCATCGAGACCAAGCAGGAGAAGGCGATGGCGCACGCCGAC
CCCACGGAGCTGGCGCTGAGCGGCCCTGGAGGCCCTTCTTTCTGACTACATCGTCAAGTGGCCCCCTTTTCGCTCATC
ATCAACAGGAAAGCCCTCACTCGCTACCAGATGCTCTTCAGGCACATGTTCTATTGCAAGCACGTGGAGCGGCAG
CTCTGCAGCGTCTGGATCAGCAACAAAACCGCCAAGCAGCACTCGCTGCACTCCGCCCCAGTGGTTTGCTGGGGCT
TTCACCTCTGCGGCAGCGAATGCTCAACTTCGTCCAGAATATTCAATACTACATGATGTTTGAAGTGATGGAACCG
ACCTGGCACATCCTGGAGAAAAACCTGAAATCCGCCTCCAACATTGACGACGTCTTGGCCACCACACAGGCTTC
CTGGACACCTGCCTGAAGGACTGCATGCTCACCAACCCCCGAGCTGCTGAAGGTCTTCTCCAAGCTCATGTCTGTG
TGCGTCATGTTTACCAACTGCATGCAGAAATTTACACAGAGCATGAAATTAGATGGCGAGCTGGGCGGGCAGACG
CTGGAGCACAGCACCGTCTTGGGGCTGCCCGCAGGGGCCGAGGAGCGGGCCGGAAGGAGCTCGCCAGGAAGCAC
CTGGCTGAGCACGCAGACACTGTGCAGCTGGTGTCCGGCTTCGAGGCCACCATCAACAAGTTTTGACAAGAACTTC
TCAGCCCACCTGCTGGACCTCCTGGCCCCGGCTGAGCATCTATAGCACCAAGTGACTGTGAGCACGGCATGGCCAGC
GTCATCTCCAGGCTTGACTTCAATGGTTTCTACACGGAGCGCCTGGAGCGCCTGTCTGCAGAGAGGAGCCAGAAG
GCCACCCCCCAAGTGCTGCTGCTGCGGGGGCCCCCGGCTCCTGCACCCAGGGTCGCAGTCACCGCACAGTGAAGCC
CTGGCTGTGACAGGAAGGAAGGGTGTGGGGTTCAGCAGGGACTGGTGCAAATGGGTCCAGAATTTTCAAATC

WO 2004/030615

PCT/US2003/028547

3367/6881
FIGURE 3102

MSEFRIHHDVNELLSLLRVHGGDGAEVYIDLLQKNRTPYVTTTTVSAHSAKVIAEF SRTPEDFLKKYDELKSKNT
RNLDP LVYLLSKLTEDKETLQYLQONAKERAELAAAVGSSTTSINVPAAASKISMQELEELRKQLG SVATGSTL
QQSLELKRKMLRDKQNKNSGQHLP IFPAWVYERPALIGDFLIGAGISTDTALP IGTLP LASQESAVVEDLLYVL
VGVDGRYVSAQPLAGRQSRFTLVDPNLDLSIRELVHRILPVAASYS AVTRFIEEKSSF EYGQVNHALAAAMRTL V
KEHLILVSQLEQLHRQGILLSLQKLWFIQ PAMRTMDILASLATSVDKGECLGGSTLSLLHDRSF SYTGDSQAQEL
CLYLTKAASAPYFEVLEKWIYRGI IHDPYSEFMVEEHEL RKERIQEDYNDKYWDQRYTIVQQQIP SFLQK MADKI
LSTGKYINVVRECGHDVTCPVAK EIIYTLKERAYVEQIEKAFNYASKVLLDFLMEEKELVAHLRS IKRYFLMDQG
DFFVHFMDLAEEELRKPVEDITPPRLEALLELALRMSTANTDPFKDDLKIDLMPHDLITQLLRVLA IETKQEKAM
AHADPT ELALSGL EAFSFDYIVKWPLSLI INRKALTRYQMLFRHMFYCKHVERQLCSVWISNKTAKQHSLHSAQW
FAGAF TLRQRM LN FVQNIQYYMMFEVMEPTWHILEKNLKSASNIDDLGHHTGFLDTCLKDCMLTNPELLKVFSK
LMSVCVMFTNCMQKFTQSMKLDGELGGQ TLEHSTVLGLPAGAEERARKELARKHLAEHADTVQLVSGFEATINKF
DKNFSAHL LLDLLARLSIYSTDCEHG MASVISRLDFNGFYTERLERLSAERSQKATPQVPVLRGPPAPAPRVAVT
AQ

WO 2004/030615

PCT/US2003/028547

3368/6881
FIGURE 3103

GACCCGGCCATGCGCGGCTCTGGGCTCTGGCTGCTGGGCGCGATGATGCTGCCTGCGATTGCCCCAGCCGGCCC
TGGGCCCCTCATGGAGCAGTATGAGGTCGTGTTGCCGTGGCGTCTGCCAGGCCCCGAGTCCGCCGAGCTCTGCCC
TCCCACCTTGGGCTGCACCCAGAGAGGGTGAGCTACGTCCCTGGGGCCACAGGGCACAACCTTACCCCTCCACCTG
CGGAAGAACAGGGACCTGCTGGGCTCCGGCTACACAGAGACCTATACGGCTGCCAATGGCTCCGAGGTGACGGAG
CAGCCTCGCGGGCAGGACCACTGCTTCTACCAGGGCCACGTAGAGGGGTACCCGACTCAGCCGCCAGCCTCAGC
ACCTGTGCCGGCTCAGGGGTTTCTTCCAGGTGGGGTCAGACCTGCACCTGATCGAGCCCCCTGGATGAAGGTGGC
GAGGGCGGACGGCAGCCGTGTACCAGGCTGAGCACCTGCTGCAGACGGCCGGGACCTGCGGGGTGACGGACGAC
AGCCTGGGCAGCCTCCTGGGACCCCGGACGGCAGCCGTCTTCAGGCCTCGGCCGGGGACTCTCTGCCATCCCGA
GAGACCCGCTACGTGGAGCTGTATGTGGTCTGTGGACAATGCAGAGTTCAGATGCTGGGGAGCGAAGCAGCCGTG
CGTCATCGGGTGTGAGAGTGGTGAATCACGTGGACAAGCTATATCAGAACTCAACTTCCGTGTGGTCTCTGGT
GGCCTGGAGATTTGGAATAGTCAGGACAGGTTCCACGTACGCCCCGACCCAGTGTACACTGGAGAACCTCCTG
ACCTGGCAGGCACGGCAACGGACACGGCGGCACCTGCATGACAACGTACAGCTCATCAGGGTGTGCACTTCACC
GGGACTACCGTGGGGTTTGCCAGGGTGTCCGCCATGTGCTCCACAGCTCAGGGGCTGTGAACAGGACCACAGC
AAGAACCCCGTGGGCGTGGCCTGTACCATGGCCCATGAGATGGGCCACAACCTGGGCATGGACCATGATGAGAAC
GTCCAGGGCTGCCGCTGCCAGGAACGCTTCGAGGCCGGCCGCTGCATCATGGCGGGCAGCATTTGGCTCCAGTTTC
CCCAGGATGTTTCACTGACTGCAGCCAGGCCTACCTGGAGAGCTTTTGGAGCGGCCGAGTCGGTGTGCCCTGCC
AACGCCCTGACCTCAGCCACCTGGTGGGCGGCCCGTGTGTGGGAACCTGTTGTGGAGCGTGGGGAGCAGTGC
GACTGCGGCCCCCGAGGACTGCCGGAACCGCTGCTGCAACTCTACCACCTGCCAGCTGGCTGAGGGGGCCAG
TGTGCGCACGGTACCTGCTGCCAGGAGTGCAAGGTGAAGCCGGCTGGTGAGCTGTGCCGTCCCAAGAAGGACATG
TGTGACCTCGAGGAGTTCTGTGACGGCCGGCACCCTGAGTGCCCGGAAGACGCCCTCCAGGAGAACGGCACGCCC
TGCTCCGGGGGCTACTGCTACAACGGGGCCTGTCCACACTGGCCAGCAGTGCCAGGCCTTCTGGGGGCCAGGT
GGGCAGGCTGCCGAGGAGTCTGCTTCTCCTATGACATCCTACCAGGCTGCAAGGCCAGCCGGTACAGGGCTGAC
ATGTGTGGCGTTCTGCACTGCAAGGGTGGGCAGCAGCCCCCTGGGGCGTGCCATCTGCATCGTGGATGTGTGCCAC
GCGCTCACACAGAGGATGGCACTGCGTATGAACAGTGCCCGAGGGCAGCCGGTGTGGACCAGAGAAGGTTTGC
TGGAAGGACGTTGCCAGGACTTACACGTTTACAGATCCAGCAACTGCTCTGCCAGTGCCACAACCATGGGGTG
TGCAACCACAAGCAGGAGTGCCACTGCCACGCGGGCTGGGCCCGCCCCACTGCGCGAAGCTGTGACTGAGGTG
CACGCAGCGTCCGGGAGCCTCCCCGTCTTCGTGGTGGTGGTTCTGGTGTCTTGGCAGTTGTGTGGTCACCCTG
GCAGGCATCATCGTCTACCGCAAAGCCCGGAGCCGCATCCTGAGCAGGAACGTGGCTCCCAAGACCACAATGGGG
CGCTCCAACCCCTGTTCCACCAGGCTGCCAGCCGCGTGCCGGCCAAGGGCGGGGCTCCAGCCCCATCCAGGGGC
CCCCAAGAGCTGGTCCCCACCACCCACCCGGGCCAGCCCGCCCCGACACCCGGCCTCCTCGGTGGCTCTGAAGAGG
CCGCCCCCTGCTCCTCCGGTCACTGTGTCCAGCCCAACCTTCCAGTTCTGTCTACACCCGGCAGGCACCAAAG
CAGGTCACTAAGCCAACGTTTCGACCCCCAGTGCCCCAGTCAAACCCGGGGCTGGTGCGGCCAACCTGGTCCA
GCTGAGGGTGTGTTGGCCCAAAGGTTGCCCTGAAGCCCCCATCCAGAGGAAGCAAGGAGCCGAGCTCCACAG
CACCTAGGGGGGCACCTGCGCTGTGTGGAAATTTGGAGAAGTTGCGGCAGAGAAGCCATGCGTTCCAGCATTC
CACGGTCCAGCTAGTGCCGCTCAGCCCTAGACCCTGACTTTGCAGGCTCAGCTGCTGTTTAACTCAGGAATGC
ATCTACCTGAGAGGCTCCTGCTGTCCAGCCCTCAGCCAATTCTTCTCCCCGCTTGCCACGTGTAGCCCCAG
CTGTCTGCAGGCACAGGCTGGGATGAGCTGTGTGCTTGCGGGTGCGTGTGTGTGTACGTGTCTCCAGGTGGCCG
CTGGTCTCCCGCTGTGTTTCCAGGAGCCACATATACAGCCCCCTCCAGCCACACCTGCCCTGCTCTGGGGCCTGC
TGAGCCGGCTGCCCTGGGCACCCGGTTCCAGGCAGCACAGAGCTGGGGCATCCCCAGAAAGACTCCATCCAGGA
CCAGGTTCCCTGCGTGTCTTTCGAGAGGGTGTGAGTGCAGAGCTGCACCCCAAGCTCCCGACTCCAGGTCCCC
TGATCTTGGGGCCTGTTTCCCATGGGATTCAAGAGGGACAGCCCCAGCTTTGTGTGTGTTAAGCTTAGGAATCG
CCTTTATGGAAGGGCTATGTGGGAGAGTCAGCTATCTTGTCTGGTTTTCTTGAGACCTCAGATGTGTGTTTACG
AGGGCTGAAAGCTTTTATTCTTTAATAATGAGAAATGTATATTTTACTAATAAATTATTGACCGAGTCTGTAGA
TTCTTGTTAGA

WO 2004/030615

PCT/US2003/028547

3369/6881
FIGURE 3104

ATGGGCCAGAATGTTGCAGATTACATGTGCTACTTAATGCAAGAAGATGAAGATGCTTACAAGAAACAGTTCTCT
CAATACATAAAGAACAGCGTAACTCCAGACATGAGAGATAAGAAAGCTCATGCTGCTCTACAAGAGAATCCAGGC
TATGAGAAGAAGCCCAAGAAAGAAGTTGAAAGAAGAGGCAAAACCGTCCCAAAATGGCCTTTGCTCAGAAGAAA
GTTGCGGTAGCTCAAAGAAGGCAAGCTTCCTTGGAGCTCAGGAGCTGCTTGA

WO 2004/030615

PCT/US2003/028547

3370/6881
FIGURE 3105

MGQNVADYMCYLMQEDEDAYKKQFSQYIKNSVTPDMRDKKAHAALQENPGYEKKPKKEVRKKRQNRPKMAFAQKK
VRVAQRRQASLELRSC

WO 2004/030615

PCT/US2003/028547

3371/6881
FIGURE 3106

TCTAATACCTATTGATCTGTTACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTA
ACACGCCCCACTGATTCTACATTATGGTGAGTTCTATGATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGATCATGACTCACAATGGCCTATTTAGGCCCATACCCTACGTCAC
GGCAGCCTCCACAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCCAGGTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCCAGCCTCTGCCTCCCGT
CAGCCTCTACAGTCCCAACGTCTGCCTCACAGCAGATTCTTCAGCCCCAGCATCTACCTCACTTGGACCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTTGGCAGCCTCTCCAGGCCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCAGCCTCTGC
CTCACAGCGGACTCTC

WO 2004/030615

PCT/US2003/028547

3372/6881
FIGURE 3107

CGGCCGCCCCGCGACTGCGCCACGTCTGAGGCGGCTGTGGCCACGTCTGAGGCGGCTGTGGCCGCGTCGGTGTC
CGCGTCGAGGAGCCGGGGCAGGGCACCAATGCGGACTGGGCTCGGGCTCAGAGCCCGGGCGCTGTGGAAGAGATT
CTAGACCGGGAGAACAAGCGAATGGCTGACAGCCTGGCCTCCAAAGTCACCAGGCTCAAATCGCTCGCCCTGGAC
ATCGATAGGGATGCAGAGGATCAGAACCGGTACCTGGATGGCATGGACTCGGATTTTACAAGCATGACCAGCCTG
CTTACAGGGAGCGTGAAGCGCTTTTCCACAATGGCAAGGTCCGGACAAGACAACCGGAAGCTTCTATGTGGCATG
GCCGTGGGTCTAATTGTGGCCTTCTTCATCCTCTCCTACTTCTTGTCCAGGGCAAGGACGTGAGCCAGTGGGAGC
TGGTGCTGTGGGTGCCAAGGGCAGCCAGCGGTCTTCCCTGCCTGGTGTTTTGGGCTCCACAGGACTTACCTACA
AAATACTCCTTTGCAATGAT

WO 2004/030615

PCT/US2003/028547

3373/6881
FIGURE 3108

MADWARAQSPGAVEEILDRENKRMADSLASKVTRLKSLALDIDRDAEDQNRYL DGMSDFTSMTSLLTGSVKRFS
TMARSGQDNRKLLCGMAVGLIVAFFILSYFLSRART

WO 2004/030615

PCT/US2003/028547

3374/6881
FIGURE 3109

CGGGGCCGGCGAACTGCGGCCCGGAACGGCTGAGGAAGGGCCCGTCCCGCCTTCCCCGGCGCGCCATGGAGCCCC
GGGCGGTTGCAGAAGCCGTGGAGACGGGTGAGGAGGATGTGATTATGGAAGCTCTGCGGTATACAACCAGGAGC
ACTCCCAGAGCTTACGTTTGATGATGCCAACAGGAGGACCGGAAGAGACTGGCGGAGCTGCTGGTCTCCGTCC
TGGAACAGGGCTTGCCACCCTCCCACCGTGTCTGCTGAGAGTGTCCGAATCCTGTCCCGGGACCGCAACT
GCCTGGACCCGTTACCCAGCCGCCAGAGCCTGCAGGCACTAGCCTGCTATGCTGACATCTCTGTCTCTGAGGGGT
CCGTCCCAGAGTCCGCAGACATGGATGTTGTACTGGAGTCCCTCAAGTGCCTGTGCAACCTCGTGCTCAGCAGCC
CTGTGGCAGAGATGCTGGCAGCAGAGGCCCGCCTAGTGGTGAAGCTCACAGAGCGTGTGGGGCTGTACCGTGAGA
GGAGCTTCCCCACGATGTCCAGTTCTTTGACTTGCGGCTCCTCTTCTGCTAACGGCACTCCGCACCGATGTGC
GCCAGCAGCTGTTTCAGGAGCTGAAAGGAGTGCGCCTGCTAACTGACACACTGGAGCTGACGCTGGGGGTGACTC
CTGAAGGGAACCCCCACCCACGCTCCTTCTTCCCAAGAGACTGAGCGGGCCATGGAGATCCTCAAAGTGCTCT
TCAACATCACCCCTGGACTCCATCAAGGGGGAGGTGGACGAGGAAGACGCTGCCCTTACCGACACCTGGGGACCC
TTCTCCGGCACTGTGTGATGATCGCTACTGCTGGAGACCGCACAGAGGAGTCCACGGCCACGCAGTGAACCTCC
TGGGGAACCTTGCCCCTCAAGTGTCTGGATGTTCTCTCACCCTGGAGCCACATGGAGACTCCACGGAGTTTATGG
GAGTGAATATGGATGTGATTCTGTGCCCTCCTCATCTTCTAGAGAAGCGTTTGACACAAGACACACAGGCTGAAGG
AGAGTGTAGCTCCCGTGTGAGCGTGTGACTGAATGTGCCCGGATGCACCGCCAGCCAGGAAGTTCTGAAGG
CCCAGGTGCTGCCCCCTCTGCGGGATGTGAGGACACGGCCTGAGGTGGGGAGATGTGCGGAACAAGCTTGTCC
GCCTCATGACACACCTGGACACAGATGTGAAGAGGGTGGCTGCCGAGTTCTTGTGTTGCTGTGCTCTGAGAGTG
TGCCCCGATTTCATCAAGTACACAGGCTATGGGAATGCTGCTGGCCTTCTGGCTGCCAGGGGCCCTCATGGCAGGAG
GCCGGCCCCGAGGGCCAGTACTCAGAGGATGAGGACACAGACACAGATGAGTACAAGGAAGCCAAAGCCAGCATAA
ACCCTGTGACCGGGAGGGTGGAGGAGAAGCCGCCCTAACCTATGGAGGGCATGACAGAGGAGCAGAAGGAGCACG
AGGCCATGAAGCTGGTGACCATGTTTGACAAGCTCTCCAGGAACAGAGTCATCCAGCCAATGGGGATGAGTCCCC
GGGTCATCTTACGTCCCTGCAGGATGCCATGTGCGAGACTATGGAGCAGCAGCTCTCCTCGGACCCCTGACTCGG
ACCCTGACTGAGGATGGCAGCTCTTCTGCTCCCCCATCAGGACTGGTGTGCTTCCAGAGACTTCTTGGGGTTG
CAACCTCGGGAAGCCACATCCCCTGAGTCCACACCCGCCCCCACTTCTCCATCTTAGAAACCCCTTCTCTTGAC
TCCCGTTCTGTTTCATGATTTGCCTCTGGTCCAGTTTCTCATCTCTGGACTGCAACGGTCTTCTGTGCTAGAACT
CAGGCTCAGCCTCGAATTCCACAGACGAAGTACTTTCTTTTGTCTGCGCCAAGAGGAATGTGTTTCAAGAGCTGCT
GCCTGAGGGCAGGGCCTACCTGGGCACACAGAAGAGCATATGGGAGGGCAGGGGTTTGGGTGTGGGTGCACACAA
AGCAAGCACCATCTGGGATTGGCACACTGGCAGAGCCAGTGTGTTGGGGTATGTGCTGCACTTCCAGGGAGAAA
ACCTGTGCAAACTTTCCATACGAGTATATCAGAACACACCCTTCCAAGGTATGTATGCTCTGTTGTTCTGTCTCT
GTCTTCACTGAGCGCAGGGCTGGAGGGCTCTTAGACATTCTCCTTGGTCTCGTTACGCTGCCCCACTGTAGTATC
CACAGTGCCCCGAGTTCTCGCTGGTTTTGGCAATTAAACCTCCTTCTTACTGGTTTACTACTACACTTACAACAAGG
AAAATGCCCTCTGTGTGACCATAGATTGAGATTTATACCACATACCACACATAGCCACAGAAACATCATCTTGAA
ATAAAGAAGAGTTTTGGACAAAAA

WO 2004/030615

PCT/US2003/028547

3375/6881
FIGURE 3110

MEPRAVAEAVETGEEDVIMEALRSYNQEHSSQSTTFDDAQQEDRKRLAELLVSVLEQGLPPSHRVIWLQSVRILSR
DRNCLDPFTSRQSLQALACYADISVSEGSVPESADMVVLESCLKCLCNLVLSSPVAQMLAAEARLVVKLTERVGL
YRERSFPHDVQFFDLRLLELLTALRTDVRQQLFQELKGVRLLTDTLELTGVTPEGNPPPTLLPSQETERAMEIL
KVLFNITLDSIKGEVDEEDAALYRHLGTLRHCVMIAATAGDRTEEFHGHAVNLLGNLPLKCLDVLLTLEPHGDST
EFMGVNMDVIRALLIFLEKRLHKTHRLKESVAPVLSVLTECARMHRPARKFLKAQVLPPLRDVTRPEVGEMLRN
KLVRLMTHLDTDVKRVAAEFLFVLCSESVPRIKYTGYGNAAGLLAAGLMAGGRPEGQYSEDEDTDTDEYKEAK
ASINPVTGRVEEKPPNPMEGMTEEQKEHEAMKLVMTFDKLSRNRVIQPMGMSPRGHLTSLQDAMCETMEQQLSSD
PDSDPD

WO 2004/030615

PCT/US2003/028547

3376/6881
FIGURE 3111

TTTCCGGCAGCCATCCCCGCGGTGCTGACATCCCGGTTGTTCTTCTGTGCCGGGGGTCTTCCTGCTGTCAATGAAG
GACGTACCGGGCTTCCCTACAGCAGAGCCAGAGCTCCGGGCCCCGGCAGCCCGCTGTGTGGCACCCTCTGGAGGAG
CTCTACACGAAGAAGTTGTGGCATCAGCTGACACTTCAGGTGCTTGATTTTGTGCAGGATCCGTGCTTTGCCCAA
GGAGATGGTCTCATTAAGCTTTATGAAAACCTTTATCAGTGAATTTGAACACAGGGTGAATCCTCTGTCCCTCGTG
GAAATCATTCTTCACGTAGTTAGACAGATGACTGATCCTAATGTGGCTCTTACTTTTCTGGAAAAGACTCGTGAG
AAGGTGAAAAGTAGTGATGAGGCAGTGATCCTGTGTAAAACAGCAATTGGAGCTCTAAAATTTAAACATCGGGGAC
CTACAGGTTACAAAGGAAACAATTGAAGATGTTGAAGAAATGCTCAACAACCTTCCTGGTGTGACATCGGTTTCAC
AGTCGTTTCTATGATCTCTCCAGTAAATACTATCAAACAATCGGAAACCACGCGTCCTACTACAAAGATGCTCTG
CGGTTTTTGGGCTGTGTTGACATCAAGGATCTACCAGTGTCTGAGCAGCAGGAGAGAGCCCTTCACGCTGGGGCTA
GCAGGACTTCTCGGCGAGGGAGTTTTTAACCTTTGGAGAACTCCTCATGCACCCTGTGCTGGAGTCCCTGAGGAAT
ACTGACCGGCAGTGGCTGATTGACACCCTCTATGCCTTCAACAGTGGCAACGTAGAGCGGTTCCAGACTCTGAAG
ACTGCCTGGGGCCAGCAGCCTGATTTAGCAGCTAATGAAGCCCAGCTTCTGAGGAAAATTTCAGTTGTTGTGCCTC
ATGGAGATGACTTTCACACGACCTGCCAATCACAGACAACCTCACTTTTGAAGAAATTGCCAAAAGTGCTAAAATC
ACAGTGAATGAGGTGGAGCTTCTGGTGATGAAGGCCCTTTCCGGTGGGGCTGGTGAAAGGCAGTATAGACGAGGTG
GACAAACGAGTCCACATGACCTGGGTGCAGCCCCGAGTGTGGATTGCAACAGATCAAGGGAATGAAGGACCGC
CTGGAGTTCTGGTGCACGGATGTGAAGAGCATGGAGATGCTGGTGGAGCACCAGGCCCATGACATCCTCACCTAG

GGCCCCCTGGTTCCCCGTCGTGTCTCCTTTGACTCACCTGAGAGAGGCATTTGCAGCCAATGAAGCTGGCTGCTC
AGACGGTGCACATTGAATTTGGGTGGGGTTGGGATCCTGTCTGAAGTACAGACTGTCCCTGCTCTAAAAACAGG
ACTGTCCCTGATGGGAGCCAGGCCACAGGGAGGAGGCTTCTTTGTGGGTCTCTCCTGCAGAGGTGGGGGTCTCA
GGGTCTTAGGTGATACGGGAGAGAAAGAACGTGCCAGGCAGGAGGCCCTGAAGTCTGTGTACTCCGAGGTGGA
TCTCCATCCCCATCCACCTGTACGGACATCTTTTCCGTTGTGGTTTGAAGATGTTCTATAATAAACCCCTCTGC
TTTGTT

WO 2004/030615

PCT/US2003/028547

3377/6881
FIGURE 3112

MKDVP GFLQQSSSGPGQPAVWHRLEELYTKKLWHQLTLQVLD FVQDPCFAQGDGLIKLYENFISEFEHRVNPLS
LVEIILHVVRQMTDPNVALTFLEKTREKVKSSDEAVILCKTAIGALKLNIGDLQVTKETIEDVEEMLNNLPGVTS
VHSRFYDLSSKYYQTIGNHASYYKDALRFLGCVDIKDLPVSEQQERAFTLGLAGLLGEGVFNF GELLMHPVLESL
RNTDRQWLIDTLYAFNSGNVERFQTLKTAWGQQPDIAANEAQLLRKIQLLCLMEMTFTRPANHRQLTFEEIAKSA
KITVNEVELLVMKALSVGLVKGSIDEVDKRVHMTWVQPRVLDLQQIKGMKDRLEFWCTDVKSMEMLVEHQHDIL
T

WO 2004/030615

PCT/US2003/028547

3378/6881
FIGURE 3113

CAACACAGGGGCAGTCTCCAGGACCTCCACACCATTAAACAAGATGAGCCTTGCTGCTCCCTTGGGCTCTAGAGAGG
AAGCCCCCTCTGAGCCCTCAGCCCCCTCTTTCCCTCCCTCTCCTAAAGTAATTTGATCCTCAGGAATTTGTTCTGCCC
TCATCTGGCCCTGGCCAGCTCTGCATTTGACAAATGCCAGGAAGAGGAAACTGTTGAGAAAACGGAACTACTGGG
GAAAGGGAGGGCTCACTGAGAACCATCCCGGTAACCCGACCGCCGCTGGTCACCATGAACCACATTGTGCAAACC
TTCTCTCCTGTCAACAGCGGCCAGCCTCCCAACTACGAGATGCTCAAGGAGGAGCAGGAAGTGGCTATGCTGGGG
GGGCCCCACAACCCTGCTCCCCCGACGTCCACCGTGATCCACATCCGCAGCGAGACCTCCGTGCCTGACCATGTC
GTCTGGTCCCTGTTCAACACCCCTCTTCATGAACACCTGCTGCCTGGGCTTCATAGCATTCGCCTACTCCGTGAAG
TCTAGGGACAGGAAGATGGTTGGCGACGTGACCGGGGCCCCAGGCCTATGCCTCCACCGCCAAGTGCCTGAACATC
TGGGCCCTGATTTTGGGCATCTTCATGACCATTCTGCTCGTCATCATCCCAGTGTGGTCCGTCCAGGCCAGCGA
TAGATCAGGAGGCATCATTGAGGCCAGGAGCTCTGCCCCTGACCTGTATCCCACGTACTCTATCTTCCATTCTC
GCCCTGCCCCCAGAGGCCAGGAGCTCTGCCCTTGACCTGTATTCCACTTACTCCACCTTCCATTCTCGCCCTGT
CCCCACAGCCGAGTCTGTCATCAGCCCTTTATCCTCACACGCTTTTCTACAATGGCATTCAATAAAGTGTATATG
TTTCT

WO 2004/030615

PCT/US2003/028547

3379/6881
FIGURE 3114

MNHIVQTFSPVNSGQPPNYEMLKEEQEVAMLGGPHNPAPPTSTVIHIRSETSVDPDHVVWSLFNTLFMNTCCLGFI
AFAYSVKSRDRKMVGDTVGAQAYASTAKCLNIWALILGIFMTILLVIIPVLVVQAQR

WO 2004/030615

PCT/US2003/028547

3380/6881
FIGURE 3115

TTTAACACCCATAGTAGGCCTAAAAGCAGCCACCAATTAAGAAAGCCACAGCACGTACACCCACTCCAGGGATCT
GCCAGCACCTGTGGGGCCCAGACTACAGGCTGATGGCGGAGGCTTCGAGTGACCCGGGTGCTGAGGAGCGGGAA
GAGTTGCTGGGGCCCAGTCTCAGTGGAGCGTGGAGGACGAGGAGGAGGCCGTCCACGAGCAATGCCAGCATGAG
AGAGACAGGCAGCTTCAGGCCCAGGACGAGGAGGGAGGCGGCCATGTCCCCGAGCGGCCGAAGCAGGAGATGCTC
CTCAGCCTGAAGCCCTCGGAGGCCCTGAACTGGATGAGGACGAGGGCTTTGGCGACTGGTCCCAGAGGCCAGAG
CAGCGGCAGCAGCAGAGGGGGCGCAGGGCGCCTTGGACAGCGGAGAGCCCCCAGTGCAGGAGTCTTGAGGGG
GAGCAAGAGGACAGGCCCGGCCCTGCATGCCTACGAAAAGGAGGACAGTGATGAAGTCCACCTGGAGGAGTTGAGT
CTGAGCAAGGAGGGGCCAGGCCCAGAGGACACTGTCCAGGACAACCTGGGGGCCGAGGGGCTGAGGAGGAACAG
GAGGAGCACCAGAAATGTCAGCAGCCCAGGACACCCAGCCCCCTTGGTCTTGGAGGGGACCATCGAACAGAGCTCG
CCTCCCCTGAGCCCTACCACCAAACCTCATCGACAGGACCGAGTCCCCTAAACCGCTCCATAGAGAAGAGTAACAGT
GTGAAGAAATCCCAGCCAGACTTGCCCATCTCCAAGATTGATCAGTGGCTGGAACAATACACCCAGGCCATCGAG
ACCGCTGGCCGGACCCCCAAGCTAGCCCGCCAGGCCTCCATAGAGCTGCCCAGCATGGCTGTGGCCAGTACCAAG
AGTCGGTGGGAGACGGGTGAGGTACAGGCTCAGTCTGCGGCCAAGACTCCGTCCTGCAAGGATATTGTGGCTGGA
GACATGAGCAAGAAAAGCCTCTGGGAGCAGAAGGGAGGCTCCAAGACCTCATCAACAATTAAGAGCACCCCATCT
GGGAAGAGGTATAAGTTTGTGGCCACCGGGCATGGGAAGTATGAGAAGGTGCTTGTGGAAGGGGGCCCGGCTCCC
TAGGGCTCCCATCTCGCTTCCTGGGTCTGCAGGTCCAGCCGGCTGGCACCCTCCATGTACCCAGGGGAGATTCCA
GCCAGACACCCGCCCCCGGCCCTGGCTAAGAAGTTGCTTCCTGTTGCCAGCATGACCTACCTCGCTCTTTGA
TGCCATCCGCTGCCACCTCCTTTTGCTCCTGGACCCTTTAGCCTCTCTGCCCTTCCACTCTCTGACCACCGCCCC
CGCCCTCCCCACCCAGCTCCGCTTCTTGTTACTTGGGGGAGGAAAGAACTCCTGATCATTGGCCAAAGGGACTT
ACCCCTGGAGAGGCCAAGTGCCTTCTAGGAAGTTAGGAGGTTAGGCACAGCCTGTGCAGAGAGGGTGGGTACC
CCCCAGATCCAAGGGGAACTGCAGGTCAAGGGCTGATAACGGCCATGCAGGATGCTTGATGCTGCGTCCCCCG
CTGCTTGCCGCCCCCCCACCCGCCATTTTGTATAATAAAGCTCCCTGTGTATTCTC

WO 2004/030615

PCT/US2003/028547

3381/6881
FIGURE 3116

MAEASSDPGAEEREELLGPTAQWSVEDEEEAVHEQCQHERDRQLQAQDEEGGHHVPERPKQEMLLSLKPSEAPEL
DEDEGF GDWSQRPEQRQQHEGAQGALDSGEPPQCRSPEGEQEDRPGLHAYEKEDSDEVHLEELSLSKEGPGPEDT
VQDNLGAAGAEEEQEEHQKCQQPRTSPPLVLEGTIEQSSPPLSPTTKLIDRTESLNRSIEKSNSVKKSQPDLPIS
KIDQWLEQYTQAIETAGRTPKLARQASIELPSMAVASTKSRWETGEVQAQSAAKTPSCKDIVAGDMSKKSLWEQK
GGSKTSSTIKSTPSGKRYKFVATGHGKYEKVLVEGGPAP

WO 2004/030615

PCT/US2003/028547

3382/6881
FIGURE 3117

TTGCTGTAACAGTGTTTATTGATGATGAGTCCAGGGCTCCTGCTGAAGCCCTGGTGGGGAGGGGCACAGAGCGAG
ATGGGGCGTAATGGAATGCTTGAAGGCTGCTCCGTGATGTCGGTCGGAGCTTCCAGACTAGGCGAGGGCAGGGTG
AGGCCTCGGGCACACAGCCGGCGCCAGTCACCCGGCCAGATGGAGGGCGGGCCGGGCCCTGCACAGGCACCTGC
CAAGGTGGCTCACACTCACGCACACTCGTACTGAGACTCAAGGCCGTCTCCACAACCCAACCAGTGCAAAATGAC
TTAGTGCAAAATTAAATTGAGAAGGGACGGGGGAAACAGAGTCGTGGAGGCTTTGAATCTCTCAGAAAAAAGGAAA
GACAGGAAAGCTCAGAAACAAAGAGACAGAAGGATGAAAAAGAAGAAGAGGGAGGTGGTGGGGACGGCGTCATCC
CGCTGGAGGAGCTCAGCTCTGGGATGATGTGGTGGCTGGTGGTCAACCGTCCGCCGCAGGGGGTGGCCATGAAGA
TGGAGTCGCCGGTGCGGGGTGGGTGCTGCGGGCGCTGCTGTTCCGATGGTGTCTTTGATGTTGGGCTGATGAGGT
CTGGTTCCTCTAGCTTCCAGAGCCGATTCTGAGTCAGGTAGTGCAGTGGTTGTAAAGTGCAGCATATTCATTC
CAAGCTAGAGGGTTTTGTGTCCGGATTCAAAGGCCCAGGCTTGAGCTGGGTAGCACCATTTCTTTCATGTTGTGG
GTTCTGGGAGCCAGAGGGCAGCCATAGTGTGCCGACTCCGTGGAGGAAGTAAAGAAACAGACCCGCTTCTTGCC
GCAGCCCCACCAGCCTAAGGTGTTAGGAAGGCCGGACGCGCCTCCTCTGTCCTCGCCGTCACACCGGACCATGT
CATGTCCTGCTTGTACGTCCACCGGACCTGGCGTCTTGGCCTTCGGCAGCTGGTGGGCACGTCCACCCAGCTG
GAGACCTGGCCTCGTCTCCAGCCCGAACGCTGAGGCACCGATCCCGGCTCCGTCGCCGCCCGCAGGCCCCGCCTT
GGCCACGGGCTCTGGAGGCCAGTGCTCCCGCTCGCCGCCCGCTGCGCTCCTCACCCCTGCCTGCACCATCCTCC
CTCCTGAGAGCTCATTCACTCCGCCCCGCCCCGCTCGCCTAGTCTGGTCTCGCCCCATGCCCTTGACTCCCTGG
ATGCTGTACTGTCTGCCAAGCCAGCCCCAGGGGCTGAGCGGTGAGGGCATAACAGCGTCACCAAGTCCACTGTGGG
CCCTCTCCGCACCAAGACCCTGGGCCGAGTGCCTCGTGGGAC

WO 2004/030615

PCT/US2003/028547

3383/6881
FIGURE 3118

MMSPGLLLLKPWWGGAQSEMGRNGMLEGCSVMSVGASRLGEGVRPRAHSRRPVTRPRWRAAGPCTGTCQGGSHSR
TLVLRLKAVSTTPTSANDLVQIKFRDGGNRVVEALNLSEKRKDRKAQKQDRPMKKKKREVVGTAASSRWRSSAL
G

WO 2004/030615

PCT/US2003/028547

3384/6881
FIGURE 3119

GGGGCCAGACGCCAAGAGGGGCGCGGGGAGCACAGAGAAGCGGAGGGAAGGGCGCCACGTCGAGGGGCGGGGGA
GGCGGTGACTGGGGGGCGGAGTGGAGGCTGCACCCGGACCGCGGGCGCCAGCTCGGTTTGGGCCGACGGAGCCC
TCTGCCGTCGCGAGCCCGGGCCTCGGGAGGGGGACAGGCGGTGGCGGCACCGGGGCGCTCCGGGACGCAGCGCG
GAAAGGGGAGCGGCCCAGGGCTGCGCGCCGGGGGGAGGGCTGGAGGGGGAGCGCTTTGGGGGGTTACAACGCCGG
CGGCCTGCGAGCCGGA CTGCCTGCGGGGGGAACCGCCTCCTCGGGCGAAGCGGGGATGGGGGGAGTTGAGGTAGA
TGAAGAGGAGGCGGCGGGGAATCCGAGGCCCCGGCGGAGCGCGACCCCGCGGACGGCGCCCGGGACGGGAGTCAG
CAGCGAGGCAGCGGGCGGCGTCGACGCGGGGCCGCCTTGCCCGATGGAGGCGCTGGTGGGCAGAGCGCGGGCAGG
CGTGGGCCAGGAGGCGGGGCGGCCGGAAGGGGGGGCCGGGGCCGGCCGGGCCTCACGCAGCTCCGCCG

WO 2004/030615

PCT/US2003/028547

3385/6881
FIGURE 3120

TTCTCCCGCAACCTTCCCTTCGCTCCCTCCCGTCCCCCCCAGCTCCTAGCCTCCGACTCCCTCCCCCCTCAGCG
CCGCCCTCTCGCCTTCGCCGAACCAAAGTGGATTAATTACACGCTTTCTGTTTCTCTCCGTGCTGTTCTCTCCCG
CTGTGCGCCTGCCCGCCTCTCGCTGTCTCTCTCCCCCTCGCCCTCTCTTCGGCCCCCCTTTACAGTTCACTC
TGTCTCTCCCACTATCTCTGCCCCCTCTATCCTTGATACAACAGCTGACCTCATTTCGCCGATACCTTTTCCCC
CCGAAAAGTACAACATCTGGCCCCCCCCAGCCCCGAAGACAGCCCGTCTCCTGGACAATCAGACGAATTCTCCC
CCCCCCCCCAAAAAAAAAAAGCCATCCCCCGCTCTGCCCCGTGCGACATTGGCCCCCGCGACTCGGCCAGAGCG
GCGCTGGCAGAGGAGTGTCGGCAGGAGGGCCAACGCCCGCTGTTTCGGTTTGCACACGCAGCAGGGAGGTGGGC
GGCAGCGTCGCCGGCTTCCAGACACCAATGGGAATCCCAATGGGGAAGTCGATGCTGGTGCTTCTCACCTTCTTG
GCCTTCGCCCTCGTGCTGCATTGCTGCTTACCGCCCCAGTGAGACCCTGTGCGGCGGGGAGCTGGTGGACACCCTC
CAGTTCGCTCTGTGGGGACCGCGGCTTCTACTTCAGCAGGCCCCGCAAGCCGTGTGAGCCGTGCGAGCCGTGGCATC
GTTGAGGAGTGCTGTTTCCGCAGCTGTGACCTGGCCCTCCTGGAGACGTACTGTGCTACCCCGCCAAGTCCGAG
AGGGACGTGTCGACCCCTCCGACCGTGCTTCCGGACAACCTCCCCAGATACCCCGTGGGCAAGTTCTTCCAATAT
GACACCTGGAAGCAGTCCACCCAGCGCTGCGCAGGGGCCTGCCTGCCCTCCTGCGTGCCCGCCGGGGTACAGTG
CTCGCCAAGGAGCTCGAGGCGTTCAGGGAGGCCAAACGTACCGTCCCCTGATTGCTCTACCCACCCAAGACCCC
GCCCACGGGGGCGCCCCCCCAGAGATGGCCAGCAATCGGAAGTGAGCAAAACTGCCGCAAGTCTGCAGCCCGGCG
CCACCATCCTGCAGCCTCCTCCTGACCACGGACGTTTCCATCAGGTTCCATCCCGAAAATCTCTCGGTTCCACGT
CCCCCTGGGGCTTCTCCTGACCCAGTCCCCGTGCCCCGCTCCCCGAAACAGGCTACTCTCCTCGGCCCCCTCCA
TCGGGCTGAGGAAGCACAGCAGCATCTTCAAACATGTACAAAATCGATTGGCTTTAAACACCCTTCACATACCCT
CCCCC

WO 2004/030615

PCT/US2003/028547

3386/6881
FIGURE 3121

MGIPMGKSMVLVLLTFLAFASCCIAAYRPSETLCGGELVDTLQFVCGDRGFYFSRPASRVSRRSRGIVEECCFRSC
DLALLETYCATPAKSERDVSTPPTVLPDNFPRYPVGKFFQYDTWKQSTQRLRRGLPALLRARRGHVLAKELEAFR
EAKRHRPLIALPTQDPAHGGAPPEMASNRK

WO 2004/030615

PCT/US2003/028547

3387/6881
FIGURE 3122

CATACATGAACACAGCTCACAGCACACAAACACGCAGCCCCGACTAGCAGTCTAGAGGCCTGAGGCTTCTGGGTCC
TGGTGACGGGGCTGGCATGACCCCGGGGGTCGTCCATGCCAGTCCGCCTCAGTCGCAGAGGGTCCCTCGGCAAGC
GCCCTGTGAGTGGGCCATTTCGGAACATTGGACAGAAGCCCAAAGAGCCAAATTGTCACAATTGTGGAACCCACAT
TGGCCTGAGATCCAAAACGCTTCGAGGCACCCCAAATTACCTGCCCATTTCGTCAGGACACCCACCCACCCAGTGT
TATATTCTGCCTCGCCGGAGTGGGTGTTCCCGGGGGCACTTGCCGACCAGCCCCCTTGCGTCCCCAGGTTTGCAGC
TCTCCCCTGGGCCACTAACCATCCTGGCCCGGGCTGCCTGTCTGACCTCCGTGCCTAGTCGTGGCTCTCCATCTT
GTCTCCTCCCCGTGTCCCAATGTCTTCAGTGGGGGGCCCC

WO 2004/030615

PCT/US2003/028547

3388/6881
FIGURE 3123

MTPGVVHASPPQSQRVPRQAPCEWAI RNIGQKPKEPNCHNCGTHIGLRSKTLRGTPNYLP I RQDTHPPSVIFCLA
GVGVPGGTCRPAPCVPRFAALPWATNHPGPGCLSDLRA

WO 2004/030615

PCT/US2003/028547

3389/6881
FIGURE 3124

CCAAATTAAACCCCCCCCCCATGTAACAGGGGGGAGTGACAAAAGCAAGAACGCACGAAGCCAGCCTGGAGACC
ACCACGTCTGCCCCCGCCATTTATCGCCCTGATTGGATTTTGTTCATCTGTCCCTGTTGCTTGGGTTGAG
TTGAGGGTGGAGCCTCCTGGGGGGCACTGGCCACTGAGCCCCCTTGAGAGAAGTCAGAGGGGAGTGGAGAAGGCCA
CTGTCCGGCCTGGCTTCTGGGGACAGTGGCTGGTCCCCAGAAGTCCTGAGGGCGGAGGGGGGGGTTGGGCAGGGT
CTCCTCAGGTGTCAGGAGGGTGCTCGGAGGCCACAGGAGGGGGCTCCTGGCTGGCCTGAGGCTGGCCGGAGGGGA
AGGGGCTAGCAGGTGTGTAAACAGAGGGTTCCATCAGGCTGGGGCAGGGTGGCCGCCTTCCGCACACTTGAGGAA
CGGCGGGTCTGAGCCACAGAGCAGGAGAGCTGCCAGGTCTGCCCATCGACCAGGTTGCTTGGGCCCCGGAGCCC
ACGGGTCTGGTGATGCCATAGCAGCCACCACGCGGGCGCCTAGGGCTGCGGCAGGGACTCGGCCCTCTGGGAGGTT
TACCTCGCCCCCACTTGTCGCCCCAGCTCAGCCCCCTGCACGCAGCCCGACTAGCAGTCTAGAGGCCCTGAGGCT
TCTGGGTCTTGGTGACGGGGCTGGCATGACCCCGGGGGTCTGTCCATGCCAGTCCGCCTCAGTCGCAGAGGGTCCC
TCGGCAAGCGCCCTGTGAGTGGGCCATTCCGAACATTGGACAGAAGCCCAAAGAGCCAAATTGTCACAATTGTGG
AACCACATTGGCCTGAGCCACCCAGTGTTATATTCTGCCTCGCCGGAGTGGGTGTTCCCGGGGGCACTTGCCG
ACCAGCCCCCTTGCGTCCCCAGGTTTGCAGCTCTCCCCTGGGCCACTAACCATCCTGGCCCGGGCTGCCTGTCTGA
CCTCCGTGCCTAGTCGTGGCTCTCCATCTTGTCTCCTCCCCGTGTCCCAATGTCTTCAGTGGGGGGCCCCCTCT
TGGGTCCCCCT

WO 2004/030615

PCT/US2003/028547

3390/6881
FIGURE 3125

CAGGAGGGTGCTCGGAGGCCACAGGAGGGGGCTCCTGGCTGGCCTGAGGCTGGCCGGAGGGGAAGGGGCTAGCAG
GTGTGTAAACAGAGGGTTCCATCGACCAGGTTGCTTGGGCCCCGGAGCCCACGGGTCTGGTGATGCCATAGCAGC
CACCACCGCGGCGCCTAGGGCTGCGGCAGGGACTCGGCCTCTGGGAGGTTTACCTCGCCCCCACTTGTGCCCCA
GCTCAGCCCCCTGCACGCAGCCCGACTAGCAGTCTAGAGGCCTGAGGCTTCTGGGTCTGGTGACGGGGCTGGC
ATGACCCCGGGGTCGTCCATGCCAGTCCGCCTCAGTCGCAGAGGGTCCCTCGGCAAGCGCCCTGTGAGTGGGCC
ATTGGAACATTGGACAGAAGCCCAAAGAGCCAAATTGTCACAATTGTGGAACCCACATTGGCCTGAGATCCAAA
ACGCTTCGAGGCACCCCAAATTACCTGCCCATTGTCAGGACACCCACCCACCCAGTGTTATATTCTGCCTCGCC
GGAGTGGGTGTTCCCGGGGGCACTTGCCGACCAGCCCTTGCGTCCCCAGGTTTGCAGCTCTCCCTGGGCCACT
AACCATCCTGGCCCCGGGCTGCCTGTCTGACCTCCGTGCCTAGTCGTGGCTCTCCATCTTGTCTCCTCCCCGTGTC
CCCAATGTCTTCAGTGGGGGGCCCCCTCTTGGGTCCC

WO 2004/030615

PCT/US2003/028547

3391/6881
FIGURE 3126

MTPGVVHASPPQSQRVPRQAPCEWAIRNIGQKPKEPNCHNCGTHIGLRSKTLRGTPNYLPIRQDTHPPSVIFCLA
GVGVPGGTCTRPAPCVPRFAALPWATNHFGPGCLSDLRA

WO 2004/030615

PCT/US2003/028547

3392/6881
FIGURE 3127

AGTGCCTTAGATTCCAGCGAGCTACGCAAGCAATCCTGGCCCAGCCGAGCTTGCTTCCCCAAATCCCGTAATCCT
TGACCTTATTCCCCCAAAGAAGCGGCCTCCCGGGAAGGAGCGCCCTGGCGGAGAAGACTCGAACGGCTCCACAG
CCGGGCGTTGGGGGAAAGGCATGAAGAACTCTTGACTGACAGAAACGGAGGGTGTGTCCAAAGTTTTGAGGACGG
CCGAGCGGCGCTCCAAACCCGTCCTCACAGCCTCGCCCCGTTGCGCTCAGCTACAACAAATCATCGTCAACCTG
TTCCACCTTCTCCAGTCTGGTAGCAAAAAGGGGTGTCTCAGGCCACTCTTCACCTCCACCATGAGCCTGGACATC
CAGAGCCTGGACATCCAGTGTGAGGAGCTGAGCGACGCTAGATGGGCCGAGCTCCTCCCTCTGCTCCAGCAGTGC
CAAGTGGTCAGGCTGGACGACTGTGGCCTCACGGAAGCACGGTGCAAGGACATCAGCTCTGCACTTCGAGTCAAC
CCTGCACTGGCAGAGCTCAACCTGCGCAGCAACGAGCTGGGCGATGTCGGCGTGCAATTGCGTGCTCCAGGGCCTG
CAGACCCCTCCTGCAAGATCCAGAAGCTGAGCCTCCAGAACTGCTGCCTGACGGGGGCCGGCTGCGGGGTCTCTG
TCCAGCACACTACGCACCCTGCCACCCTGCAGGAGCTGCACCTCAGCGACAACCTCTTGGGGGATGCGGGCCTG
CAGCTGCTCTGCGAAGGACTCCTGGACCCCCAGTGCCGCTTGAAAAGCTGCAGCTGGAGTATTGCAGCCTCTCG
GCTGCCAGCTGCGAGCCCCCTGGCCTCCGTGCTCAGGGCCAAGCCGACTTCAAGGAGCTCACGGTTAGCAACAAC
GACATCAATGAGGCTGGCGTCCGTGTGCTGTGCCAGGGCCTGAAGGACTCCCCCTGCCAGCTGGAGGCGCTCAAG
CTGGAGAGCTGCGGTGTGACATCAGACAACTGCCGGGACCTGTGCGGCATTGTGGCCTCCAAGGCCTCGCTGCGG
GAGCTGGCCCTGGGCAGCAACAAGCTGGGTGATGTGGGCATGGCGGAGCTGTGCCCAGGGCTGCTCCACCCAGC
TCCAGGCTCAGGACCCTGTGGATCTGGGAGTGTGGCATCACTGCCAAGGGCTGCGGGGATCTGTGCCGTGTCTC
AGGGCCAAGGAGAGCCTGAAGGAGCTCAGCCTGGCCGGCAACGAGCTGGGGGATGAGGGTGCCCGACTGCTGTGT
GAGACCCTGCTGGAACCTGGCTGCCAGCTGGAGTCGCTGTGGGTGAAGTCCTGCAGCTTCACAGCCGCTTGCTGC
TCCCCTTCAGCTCAGTGTGGCCAGAACAGTTTTCTCCTGGAGCTACAGATAAGCAACAACAGGCTGGAGGAT
GCGGGCGTGCGGGAGCTGTGCCAGGGCCTGGGCCAGCCTGGCTCTGTGCTGCGGGTGCTCTGGTTGGCCGACTGC
GATGTGAGTGACAGCAGCTGCAGCAGCCTCGCCGCAACCCTGTTGGCCAACCACAGCCTGCGTGAGCTGGACCTC
AGCAACAACCTGCCTGGGGGACGCCGGCATCCTGCAGCTGGTGGAGAGCGTCCGGCAGCCGGGCTGCCTCCTGGAG
CAGCTGGTCCTGTACGACATTTACTGGTCTGAGGAGATGGAGGACCGGCTGCAGGCCCTGGAGAAGGACAAGCCA
TCCCTGAGGGTCATCTCCTGAGGCTCTTCTGCTGCTGCTCTCCCTGGACGACCGGCTCGAGGCAACCCTGGGG
CCCACCAGCCCCTGCCATGCTCTCACCCTGCATATCCTAGGTTTGAAGAGAAACGCTCAGATCCGCTTATTTCTG
CCAGTATATTTTGGACACTTTATAATCATTAAAGCACTTTCTTGGC

WO 2004/030615

PCT/US2003/028547

3393/6881
FIGURE 3128

MSLDIQSLDIQCEELSDARWAELLPLLQQCQVVRLLDDCGLTEARCKDISSALRVNPALAE LNLSNELGDVGVHC
VLQGLQTPSCKIQKLSLQNCCLTGAGCGVLSSTLRTLPTLQELHLSDNLLGDAGLQLLCEGLLDPQCRLEKLQLE
YCSLSAASCEPLASVLRAPDFKELTVSNNDINEAGVRVLCQGLKDSPCQLEALKLESCGVTSDNCRDLCGIVAS
KASLRELALGSNKLGDVGMAELCPGLLHPSSRLRTLWIWECGITAKGCGDLCRVLRAKESLKELSLAGNELGDEG
ARLLCETLLEPGCQLESLWVKSCSFTAACCSHFSSVLAQNRFLLELQISNNRLEDAGVRELCQGLGQPGSVLRVL
WLADCDVSDSSCSLAATLLANHSLRELDLSNNCLGDAGILQLVESVRQPGCLLEQLVLYDIYWSEEMEDRLQAL
EKDKPSLRVIS

WO 2004/030615

PCT/US2003/028547

3394/6881
FIGURE 3129

CACCCACCCACCCCTCCCCGCATTGTGGCATCAGTGCTGCTGCTTCCAGGGAGCCTTCTGGCCATCCAAGCCT
CCTCTCCAGGTTCTGCCCCTGCTGTAGTCCCCAGGCCAGTGCTTGGCAGGTGCTCAGGGAATGTATCCACCAACC
AAGGTTTGGGGTGGCTGTCTCTGCCTGACCACTTCCCCAGGCCCTGGCGGGTACCTGAGCTGTGCTCTCAGGG
CCTCAGGAACCTCCTTCCATATTCAGGGCCTGTGCCTGGGGAGGCTTCAGGGTGTAGCAGCTGTGCCATCCCAG
GCTGACCCACCCAGCTTGCCCTGGTAGCCCCAGCCTCTGGGCTAGTGTGCCGTGGGGCAGGGGATGTGCTGTAGCCT
GGTGCAGAGTCCCCAACCCAGAAAGGGGGCCATGGAAGCTGACACCCCAAGTGGCCGCCCCCTGCTCTGTCTTG
CTTCGGACACTGTGGCCGGGTCCAGGATCCTGGCATCCTGGGAGGTCTCTGGCTTTGTGGGCAGCCTGCCTGGCC
CGCACAGTCTGCCTGTCTGAGGGTGAGACACAGGTCAAGCCCCACAGACCCCTTGCTCCCCTGCTGGGGCCTCC
AGGCTCACAGACCACCCACCCCTACCCCTGTCTTGCCCAAGCAAATGAGAGGCAGGGGCTTCCCGGGCTGCTGCT
GTCCCGCCCTCTGTGGGGCAGGAGGAGGTGCCACAGAGGCTGGGTGGTGATAGCCAGGAGATGGGCTGGCATCT
GCATTACCCAAGCTCTGCTGCCCATGGTGGCCTTCTGGGGTGGGTGATGGTCCCTGCCCCCTGCCCCACCCGT
GATGTCTGCTCCAGAGACAAAGGTGGGGAGGGTGTGAAGAGGAAGTGTTTGGCCAGGGAGAGGCTGCGGCTCCT
CCTGAAACATCAGCCCTGTGGGTCTGTGTTGCAGAATCTCCGGCTGTGAAACTGTGAGGGGATTGCGCCAAGAC
GTCCTCTTCCCTCTGCCTCCACCCAGGCCACTCTTCACTCCACCATGAGCCTGGACATCCAGAGCCTGGACAT
CCAGTGTGAGGAGCTGAGCGACGCTAGATGGGCCGAGCTCCTCCCTCTGCTCCAGCAGTGCCAAGTGGTCAGGTA
CGCTTGCTCTCGGGTGGCCTTGGGGTGTGGTGGGGCAGGCTGGCGGGTGGCGGCTCCCTCTGAAGGGTGCATT
GCTCTGGAACGCCTTGTGTTGTGGACATGAAGTATGAATTCTGTGCAGCTACCACGTGCATGAGATGTGATTCTTG
TGTTTCTTTTTGACAATTTAGGAATGTAAAACCCATTCCAGGCTCATGCAGCATGGGCTGAGGTGGGCGGGCCGA
GGTGGGCGGCCACTGGCCAGTGGGTCTCTGGCTCCGGTGTCTCAGCTCCTCTCCCTCCCTTGGAGACACGAGGGC
AGGACACAGCTTGGGTCCCTCCGTGAGCCTCCATGGGGCGCTGCTTGTCCCTGCCAAGCTGGGGGCTGGGAGTC
CTCGGCCCTCGAGGTCTCTACAAACCCAGCAGCTTCACAAGCAGGACACGAGTGCCCTGGGTGGGCGGCATCTTTT
CTCTTTTTTACCTGGTGATTTCAAGTAGTGTCAGGTTTGGCGAGGAGTTACGAGGACCGGACGGGGCTCCCTGGTG
AGGTGGTCTGTGTACCTGCGGACGCTAGCTCTGGCCCAGCACCTCCAGGCAGGGTCTGCTTTTCCGCCCTGCCC
TTTTCGTCTTCTCTACTGGTCCAGGATTGCGTGGCCCTCAGCCCTCTGTCTCCTTAGCCCTCTCCCGTCTGTGAC
TGTCCCTCTGTCTCTCTGGGTTCTTGGTGGTCTGAGGGTCTGGCCAGGCTCCTGCAGGACGTCTCTGTGTTGGGC
TTGTCTGGTGGTTTTCTTGTGGTTGAAGTCCTACAGTTTTGGCAGGAATGCAGGGAGATGCCGTGGGGCTGCCAG
GAGCGTCTGTACAGGCGCCGTCTGCCACCCTCTCCACTGTGACGCCACTGCCCTTTCCTCCTGTGACTGATCAG
TGCCCTTCGAGAGATACTTTAAATTCTTTTTATTTTTAGAGACAGGGCATTGCTCTGTACCCAGGCTGGAGTGGC
TCCCTCATGGCTTATGCGGCCTCAACCTCCTGGGCTCAAGTGATCCTCCTGCCTCAGCCTCCCGAGTAGCTGGGA
TTATGGGCATGCGCCACCACGCCCGGCTACTTTTGTATTTTAGTAAAGACGGGGTTTCTCCATGTTGGTCAGGT
TGGTCTTGAACCTCCCGACCTCAGGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCA
CCGCGCCTGGCC

WO 2004/030615

PCT/US2003/028547

3395/6881
FIGURE 3130

MSLDIQSLHIQCDDLTDARWAELLLLLHNCQVDRLLDDCGLTEARCKDISSALRVNPALAE LNLSNELGDVG VHC
VLQGLQTPSCKIQKLSLQNCCLTGAGCGVLSSTLR TLPTLQELHLS DNLLGDAGLQLLCEGLLD PQCRLEKLQLE
YCSLSAASCEPLASVLR AKPDFKELTVSNNDINEAGVRVLCQGLKDSPCQLEALKLESCGVTS DNCRDLCGIVAS
KASLRELALGSNKLACTTFTGLRRWRTGCRPWRTSHP

WO 2004/030615

PCT/US2003/028547

3396/6881
FIGURE 3131A

AGAGTGAAGCCACCACTCGCTCTCGAATCGCGGACGCTGGGCCTGCGCAGGCCTGTTACAGCAGCTGCATCC
CGTCAGTGTGTAAGCCAGTGGAGCCCTCTTTGGGGCTGCTGAGAGCGGATATTGGAGCTGCCTCTCTGTCTCTGT
TTGGAGATCCTTATGAGCTGGATCCCTTCGACAGCAGTGAAGAGCTTTCTGCAAACCTCTTTCCCTCTGAGTG
CCAAGAGACGGGCTCTGTCCCGGTGAGCCCTGCAGTCCACCAGCCCGTGGCCAGGCCCGTCTCCGTGGGGCTTT
CCAGGAGGCGCTCCCTGCCCGGTGCCAGAGCCAGACTTGGAGGAGGAGCCAGTGCCTGACCTGCTGGGCAGCA
TCCTGTCCGGGCCAGAGCTCCTGATGCTGGGCAGCAGTGATGTATCATCCACCAGCGACGGCTCCCTCAGCGCCA
AGAGGGCGGCTCCAGTTTCTTTTCAGCGAACTCAGGCAGTCTGTCCAGAGGGGAAGAAGGATTCAAGGGCTGCC
TGCAGCCCCGAGCACTGCCCTCCGGGAGCCCGGCCAAGGCCCGTCAGGAAACAGGCCACAGAGCACAGGGCTCA
GCTGTCAAGGCAGGTCCCGCACCCCCGCGCCGACCGCGGGGGCGCTGTGAGGCTGGACTTGCCAGCAGCCCTG
GGGCGGTTCAGGCTCGGAATTGTCAAATGGGAGTGTGCCTGGCTTCAGACAGAGCCACAGCCCTGGTTCAACG
GCACCAACAAGCACACCTTGCCCTTGCCCTCTGCCGCTCTAAGATCTCAAGCAGAGATTCTAAGCCCCATGTC
GCAGTGTGGTGCCGGGGCTCCCTGAAGCCAGCGCCCAAGAAGACAGACATCTCTGAGCTACCCAGGATACCAA
AGATCAGGAGAGATGACGGTGGTGGCAGACGGGATGCGGCCCGGCCACGGGCAGAGCATGAGATCCCCAGTG
CCTGCATCAGCCGACTGACTGGCAGGGAGGGCACCGGGCAGCCAGGGCGAGGCACACGGGCAGAGAGCGAGGCCA
GCAGCAGGGTGCCCCGGGAGCCCGGGTGACACAGGGCAGCTCCCGGCCCCAGCCCCAGCTCCCATGGCAGTT
TGGCCCCACTGGGACCATCAAGAGGGAAGGGGTGCGGTGACCTTTGAGAGCTTCCGGATCAATATTCCTGGAA
ACATGGCACATTCCAGCCAGCTCTCCAGCCCTGGCTTCTGTAAACAGTTCCGGCCTGTGGACGATAAGGAGCAGA
GGAAGGAGAACCCCTCACCCCTCTTCTCCATCAAGAAGACGAAGCAGCTGCGGAGCGAGGTCTACGACCCATCCG
ACCCACCGGCTCCGACTCCAGCGCCCTGGCAGCAGCCCCGAGAGGTCTGGCCCCGGCTCCTGCCCTCTGAGA
TCACACGAACCATCTCCATCAACAGCCCGAAGGCCAGACGGTGCAAGGTGTGCGCTGCGTCACCTCCTACACGG
TGGAGAGCATCTTTGGTACAGAGCCCCGAACCCCTCTCGGACCGTCTCCGCCATGTCCAAGCTCCGGGGTGCA
TGGCTGCCGAGGGGGCTCTGACACGGAGCGAGAGGAGCCACAGAGAGCCAGGGCCTGGCTGCCCGGCTGCCGA
GGCCATCCCCCCCCAGAGCCCTGGGATGAGGAGGATGGGGCGTCTTGCAACCTTCTTTGGCTCTGAGGAGCGGA
CGGTGACCTGTGTGACTGTCTGTGGAGCCGGAAGCCCCACCCAGCCCGGACGTGCTGCAGGCTGCCACCCACAGAG
TCGTGGAGCTCAGGCCCCCTTCCCGGTCCCGCTCCACATCCAGCTCCCGCAGCAGGAAGAAGGCCAAGAGGAAGA
GGGTGTCCAGGGAGCACGGACGGACGCGCTCTGGGACGCGCTCTGAATCCAGGGACAGGAGCTCAGGTCAGCGT
CACCATCAGTGGGTGAGGAGCGCCCCAGGAGGCAGCGGTCCAAGGCCAAGAGCCGGCGGTCTCCAGTGACCGCT
CCAGCAGCCGAGAGCGAGCTAAGAGGAAGAAAGCCAAGGACAAGAGCAGGGAGCACAGGCGGGGGCCCTGGGGCC
ACAGCCGGAGGACGTCCCGGTGCGGGTGGGGAGCCCTGGCAGCTCTTCTATGAGCACTATGAGAGTAGGAAGA
AGAAGAAAAGGAGATCAGCGTCCAGACCTCGGGGAAGGGAGTGCTCCCCACCAGCAGCCTGGAGAGGCTCTGCA
GGCACAAGCATCAGCGGGAACGCAGCCACGAGCGGCCAGACAGGAAGGAGAGTGTGGCGTGGCCCCGAGACCGGA
GGAAGCGGAGGTCCCGGTCCCCAAGCTCGGAGCACAGGGCACGGGAGCACAGGCGGCCTCGGTCCCGTGAGAAGT
GGCCGCAGACCCGGTCCCATTTCCAGAGAGGAAGGGGGCTGTGAGGGAGGCTTCCCCAGCGCCCTTGACACAGG
GGGAGCCAGGGCGGGAAGACCTCCCCACCAGGTTGCCAGCCTTGGGGGAAGCACATGTCCTCGCCGGAGGTGGCTA
CGGCCGACAAGGCCCCCTGCAGGCTCCCCCTGTCTTGAGGTGGCAGCTGAGTGTGAGCCGGACGACCTGGACC
TGGATTATGGCGACTCCGTGGAGGCGGACACGTCTTTGATGATTTCTCAAGCGACGCCGTTTTTCATCCAGCTCG
ATGACATGAGCTCGCCACCTTCTCCCGAAAGCACAGACTCTTCCCGGAGCGAGACTTCCCACTGAAGCCTGCGT
TGCCCCAGCCAGCCTGGCCGTGGCCGCCATCCAGAGGGAGGTGTATTGATGCACGATGAAGACCTTTCGCAGC
CCCCACCCCTGCCAGAGGGCACCCAGGAGCCACATTTGCTCAGGCCGACGCGGTGAGAAGGCTGAGGCACCCA
GTTCCCCGGATGTGGCGCTGCGGGGAAGGAAGACAGCCCTCTGCGAGTGGGAGGGTACAGGAGGCAGCCCGGC
CTGAGGAGGTGGTTTCGCAGACCCCTGCTGCGGTCCAGAGCCCTGGTGAAGCGGGTACCTGGAACCTGCAGG
AGTCGGAGAGCAGCGCCCCCGCCGAGGACAGAGCCCCCGGGCACCCTTACAGGCCACAGAAGCCCCGAGAAG
GAGCCTGGGACATGGAGGATGTGGCCCCACAGGGGTGAGGCAGGTGTTCTCCGAGCTGCCCTTTCAGTCAAG
TGCTTCCGGAACCCGGTTCCAGACACAGACCCCTCTCAGGTTTACAGCCCCGGCTGCCGCTGCCCGGGCCC
AGCCCTCAAGCATCCACCTTGCCTAGTGGTACAGCCAGCCACGGTCCAGTTCATCTTCAGGGGAGCCTGCCGC
TAGTGGGCTGTGGGGCAGCACAGACCTTGGCCCCAGTGGCCGCTGCCCTGACCCAGCCTCAGAGCCAGCCAGTC
AAGCCACTGCAGCCAGCAACTCGGAGGAGAAGACCCCGCCCCAGGCTAGCTGCGGAGAAAACCAAGAAGGAGG
AGTACATGAAGAAGCTGCACATGCAGGAGCGTGCTGTGGAGGAGGTGAAGCTGGCCATCAAGCCCTTCTACCAGA

WO 2004/030615

PCT/US2003/028547

3397/6881
FIGURE 3131B

AGAGGGAGGTGACCAAGGAGGAGTACAAGGACATCCTGCGCAAGGCCGTGCAGAAGATCTGCCACAGCAAGAGTG
GAGAGATCAACCCCGTGAAGGTGGCCAACCTGGTGAAGGCGTACGTGGACAAGTACAGGCACATGCGCAGGCACA
AGAAACCAGAGGCCGGGGAGGAGCCGCCACGCAGGGGGCCGAGGGCTGAGGCCAGGCAATCACGGGCTATGCCC
GGGGAGCTGTCGGGAGTGGCGGGAATCGGGGCCATGCCCGGGGAGCTGTCGGGAGTGGCGGGAATCGGGGCCATG
CCCGGGGAGCTGTCGGGAGTGGCGGGAATGGGGGGCATCACCATGCCTGCCGTCGGGTTCTGCGCTGACACCT
GGTCTGTGCACCTGTGTTGCTCACAGTTGAAAACCTGGACACTTTTGTATGTATATTATAGAGACACTGTTTCCAT
TCTAATTTATCAAAAATGGATTATCTTTAGAAACCTCTTGATTGACTTACTACTTGGAAGATAAAGCACTTGGTG
ATCAAGAGGGGCTCCTGGTGGGGTGGCGCGTCCTTGATAAATCTCTAGGTGGCCTCCCGCCAACAGCTGCTGTGT
ACCTTTGGCTCTGAATTAGGAATATCTTTACTTTCTCTTTTCC

WO 2004/030615

PCT/US2003/028547

3398/6881
FIGURE 3132

MDDDSLDELVARSPGPDGHPQVGPADPAGDFEESSVGSSGDSGDDSDSEHGDGTDGEDEGASEEEDLEDRSGSED
SEDDGETLLEVAGTQGGKLEAAGSFNSDDDAESCPICLNAFRDQAVGTPENCAHYFCLDCIVEWSKNANSCPVDRIT
LFKCICIRAQFGGKILRKIPVENTKASEEEEDPTFCEVCGRSDREDRLLLCDGCDAGYHMECLDPPLQEVFVDEW
FCPECAAPGVVLAADAGPVSEEEVSLLLADVPTTSRLRPRAGRTRAIARTRQSERVRATVNRNRI STARRVQHT
PGRLGSSLLDEAIEAVATGLSTAVYQRPLTPRTPARRKRKTRRRKKVPGRKKTPSGPSAKSKSSATRSKKRQHRV
KKRRGKKVKSEATTRSRIARTLGLRRPVHSSCIPSVLKPVEPSLGLLRADIGAASLSLFGDPYELDPFDSSEELS
ANPLSPLSAKRRALSRSALQSHQPVARPVSGLSRRRLPAAVPEPDLEEEPVPDLLGSILSGQSLMLGSSDVI I
HRDGSLSAKRAAPVSFQRNSGSLSRGEEGFKGCLQPRALPSGSPAQGP SGNRPQSTGLSCQGRSRTPARTAGAPV
RLDLPAAPGAVQARNLSNGSVPGFRQSHSPWFNGTNKHTLPLASAASKISSRDSKPPCRSVVP GPPLKPAPRRTD
ISELPRIPKIRRDDGGGRRDAAPAHGQSIEIPSACISRLTGREGTGQPGRGTRAESEASSRVPREPGVHTGSSRP
PAPSSHGSLAPLGP SRGKGVGSTFESFRINIPGNMAHSSQLSSPGFCNTFRPVDDKEQRKENP SPLFSIKKTKQL
RSEVYDP SDPTGSDSSAPGSSPERSGPGLLPSEITRTISIKQPEGPDGAGCALRHAPTLVESIFGTEPEPPLGPS
SAMSKLRGAVAAEGASDTEREPTESQGLAARLRRPSPPEPWDEEDGASCSTFFGSEERTVTCVTVVEPEAPPSP
DVLQAATHRVVELRPPSRSRSTSSSRSRKKAKRKRV SREHGRTRSGTRSESRDRSSRSASP SVGEERPRRQRKA
KSRRSSDRSSSRERAKRKKAKDKSREHRRGPWGHSRRTSRSRSGSPGSSSYEHYESRKKKKRRSASRPGRGCS
PTSSLERLCRHHKQRERSHERPDRKESVAWPRDRRKRRSRSPSSEHRAREHRRPRSREKWPQTRSHSPERKGAVR
EASPAPLAQGEFGREDLPTRLPALGEAHVSPEVATADKAPLQAPPVLEVAACEPDDDLDDYGD SVEAGHVFDFF
SSDAVFIQLDDMSSPPSPFESTDSSPERDFPLKPALPPASLAVAAIQREVSLMHDEDPSQPPPLPEGTQEPHLLRP
DAAEKAEPSSPDVAPAGKEDSPSASGRVQEAARPEEVVSQTPLLRSRALVKRVTNLQESSESSAPAEDRAPRAP
LHRPQKPREGAWDMEDVAPTGVQAF SELPFP SHVLPEPGFPDTPDPSQVYSPGLPPAPAQPSS IPPCALVSQPTV
QFIIQGSILPLVGCGAAQTLAPVPAALTPASEPASQATAASNSEKTPAPRLAAEKT KKEEYMKKLHMQERAVEEV
KLAIKPFYQKREVTKEEYKDILRKAVQKICHSKSGEINPVKVANLVKAYVNKYRHMRHKKPEAGEEPPTQGAEG

PCT/US2003/028547

[illegible]

WO 2004/030615

PCT/US2003/028547

3400/6881
FIGURE 3134

MQPSSLLPLALCLLAAPASALVRIPLHKFTSIRRTMSEVGGSVEDLIAKGPVSKYSQAVPAVTEGPIPEVLKNYM
DAQYYGEIGIGTPPQCFTVVFDTGSSNLWVPSIHCKLLDIACWIHHKYNSDKSSSTYVKNGTSFDIHYGSGSLSGY
LSQDTVSVPCQSASSASALGGVKVERQVFGEATKQPGITFIAAKFDGILGMAYPRISVNNVLPVFDNLMQQKLVD
QNIFSFYLSRDPDAQPGGELMLGGTDSKYYKGSLSYLNVTRKAYWQVHLDQVEVASGLTLCKEGCEAIVDTGTSL
MVGPVDEVRELQKAIGAVPLIQGEYMIPEKVSTLPAILKLGGKGYKLSPEDYTLKVSQAGKTLCLSGFMGMDI
PPPSGPLWILGDVFIGRYYTVFDRDNNRVGFAEAARL

WO 2004/030615

PCT/US2003/028547

3401/6881
FIGURE 3135

GCGCGCAACGGCGGGCGACGGCGGGCGACCCACCGCACATCCTGCCAGGCCTCCGGCGCCCAGGGCGCACGGCGCG
CCCCCGTGCCGGCGGCCCTGCGCCCATTTCTTGCGGCCCCCGCCGGTCGGCCCCGAGGCCCTTTGCCGGCC
ACCAGCCAGGCCCCGCGCCGGCCCCGCCGCCAGGACCGGCCCGCGCCCCGAGGCCGCCCGCCGCCCGCGC
CGCCATGGGAGTGGAGGGCTGCACCAAGTGCATCAAGTACCTGCTCTTCGTCTTCAATTTTCGTCTTCTGGCTGGC
TGGAGGCGTGATCCTGGGTGTGGCCCTGTGGCTCCGCCATGACCCGCAGACCACCAACCTCCTGTATCTGGAGCT
GGGAGACAAGCCCGCGCCCAACACCTTCTATGTAGGCATCTACATCCTCATCGCTGTGGGCGCTGTCATGATGTT
CGTTGGCTTCCCTGGGCTGCTACGGGGCCATCCAGGAATCCCAGTGCCTGCTGGGGACGTTCTTTCACCTGCCTGGT
CATCCTGTTTGCCTGTGAGGTGGCCGCCGGCATCTGGGGCTTTGTCAACAAGGACCAGATCGCCAAGGATGTGAA
GCAGTTCTATGACCAGGCCCTACAGCAGGCCGTGGTGGATGATGACGCCAACAACGCCAAGGCTGTGGTGAAGAC
CTTCCACGAGACGCTTGACTGCTGTGGCTCCAGCACACTGACTGCTTTGACCACCTCAGTGCTCAAGAACAATTT
GTGTCCCTCGGGCAGCAACATCATCAGCAACCTCTTCAAGGAGGACTGCCACCAGAAGATCGATGACCTCTTCTC
CGGGAAGCTGTACCTCATCGGCATTGCTGCCATCGTGGTCGCTGTGATCATGATCTTCGAGATGATCCTGAGCAT
GGTGCTGTGCTGTGGCATCCGGAACAGCTCCGTGTACTGAGGCCCCGCAGCTCTGGCCACAGGGACCTCTGCAGT
GCCCCCTAAGTGACCCGGACACTTCCGAGGGGGCCATCACCGCCTGTGTATATAACGTTTCCGGTATTACTCTGC
TACACGTAGCCTTTTTACTTTTGGGGTTTTGTTTTTGTCTGAACTTTCCTGTTACCTTTTTCAGGGCTGACGTCA
CATGTAGGTGGCGTGTATGAGTGGAGACGGGCCTGGGTCTTGGGGACTGGAGGGCAGGGGTCTTCTGCCCTGGG
GTCCCAGGGTGCTCTGCCTGCTCAGCCAGGCCTCTCCTGGGAGCCACTCGCCCAAGAGACTCAGCTTGGCCAACTT
GGGGGGCTGTGTCCACCCAGCCCGCCCGTCTGTGGGCTGCACAGCTCACCTTGTTCCCTCCTGCCCCGGTTTGA
GAGCCGAGTCTGTGGGCACCTCTGCTTTCATGCACCTGTCTTTCTAACACGTCGCCTTCAACTGTAATCACAA
CATCCTGACTCCGTCATTTAATAAAGAAGGAACATCAGGCATGCT

WO 2004/030615

PCT/US2003/028547

3402/6881
FIGURE 3136

CTTGCTCGCGGAGAGAGGAGCTAGGAGCCTCGGCCAATGGGAGCCGGCGTTGTTGGAGGCCACGGCGGCGCAGCC
CCAAAGCGAGCGAAGCTAGGGTCGCCGCCACTGCCGCAGGAGGCGTGAGGGGATAAAAACATTCAGATGGCAGAT
CACAGTTTTTTCAGATGGGGTTCCTTCAGATTCCGTGGAAGCTGCTAAAAATGCAAGTAACACAGAAAAGCTCACA
GATCAGGTGATGCAGAATCCTCGAGTTCTGGCAGCTTTACAGGAGCGACTTGACAATGTCCCTCACACCCCTTCC
AGCTACATCGAAACTTTACCTAAAGCAGTAAAAAGAAGTAATTAATGCATTGAAACAACCTTCAGGTGAGATGTGCT
CACATAGAAGCCAAGTTCTATGAAGAGGTACATGACTTGGAAAGAAAGTATGCAGCGCTATACCAGCCTCTCTTT
GACAAGAGAAGAGAATTTATCACC GGCGATGTTGAACCAACAGATGCGGAATCGGAATGGCACAGTGAAAATGAA
GAGGAAGAGAAATTGGCTGGAGACATGAAAAGTAAAGTAGTCGTCACAGAAAAAGCAGCGGCAACGGCTGAAGAG
CCAGATCCCAAAGGAATTCCAGAGTTCTGGTTTACCATCTTCAGAAATGTGGACATGCTGAGTGAATTAGTCCAG
GAATATGATGAACCAATCTTGAAACACCTGCAGGATATTAAAGTGAAATTTCTGACCCCTGGACAGCCTATGTCT
TTTGTGTTAGAGTTCCACTTTGAACCAACGACTACTTTACCAACTCAGTCCTGACAAAAACCTACAAGATGAAA
TCAGAACCAGATAAGGCTGATCCCTTTTCTTTGAAGGTCCTGAGATTGTGGACTGTGACGGGTGTACTATTGAC
TGGAAGAAAGGAAAGAATGTTACTGTCAAACCATCAAGAAAAAGCAGAAGCATAAGGGTCGAGGCACTGTTAGA
ACAATTACGAAACAAGTACCCAATGAGTCCTTTTCAACTTCTTCAATCCATTGAAAGCATCCGGGGATGGAGAA
TCACTGGATGAAGATTCTGAATTCACATTAGCCTCTGATTTTGAAATTGGACACTTTTTCCGTGAGCGGATAGTC
CCGCGGGCTGTGCTGTACTTCACTGGGGAGGCCATAGAAGATGATGACAAATTTGAAGAAGGTGAAGAAGGAGAA
GAGGAGGAATTAGAAGGTGACGAGGAGGGAGAACGAGGATGATGCGGAAATTAACCCCAAGGTGTAATTTTGT
TCTGTTAATCATTTCATACGTTTCTAGAAGGAACCCAGCCAGCCGGCGGAATGCAAGCAGCAGTAGGAAGCGGAGG
CGGGTGCCCTGGCAGACCGGCTGTGCGGACTCCAGGCCTGTGGGCGGGGCCCTCGGTCTTGCCGCAGCACAAATCCC
GTGGACAGAGCTTACTCCATCTAACTCGTTTTCAAGTGCATGATTTTCACTTTCACTTTTCTTTTCTTTATTA
TTTTGCTTAACTTGTACAGTGGCAACTGAAATGCATTTAGAAAATAGGAGGTTTCGTCCAGCACCCCTCTGCAGCC
TTGGTGCCTGTAGCTCTGGACTTCCCTGGGCCTTCCCTGTGGGAGGGCCCTGTAGACCACATCAGGGTGGGGTG
GGGGTCACTTGGCAAAAAGGGCCGAGGTCTGGTGATGTGGTTCCAGGATCTGGAACCTCTCCACCCCTCCTGC
AGTTGGACTGAATTCTTCCCTTTCATCCGAAGAAACCCACTTGCTGTTTCCAGCCGCTGAATCTGCTGAGTGTGC
AGCCTGCATCACCTGCTGTATGCCGATCATCTCAGAAAGGGCTGTGTAGAGTAGGGCCCTGTTCTCCTTAGGATG
TTGCTTCTTCATTTTTTTTTTTTTTTTGGGGTGGGTGAGGGTTGTGACACACCAGCCAGGTGAGAGCTGCTGCG
GGTCACCTCATATTTATTTATCCCTTCTTGCTGTGAGGACTGCGGCTTTTCGCTGTGGCTCGTCTTAACGTTT
CTGAACCACCTTGGTGCCCTGAGCAGGAAGATGTGCCACTTCCTAGCAGGCGCAAGGCCTGTGCGGAAGAAACGC
CGCTCCCTGCCACCAGGGCTGAAGATGCGAGCCCGTCTCATGACGAGGCGCCACCCTGCTGCCGAGCCGGGC
TTCGGCAGTCTTCTCCACTGAGGGACTGGGCTGGGAAGTCTGCGTTTCAGTGGAGCGTATGAGCGTCAAGTCCT
GCTTTCTCAGTAGCCCCATTGCGGGGCCCCACCATTATCCTGTCTGAAGGTCTGGGTTTGGTGTGACCGCTTG
GCGGCTGGTGGTGGGGTTTTCAAGTGGGTGACGGCGCTCTCCGCGAGCCGGGGATGGCCGTGTCCGCACTGACC
AGGCCTGTGGAGAGTGCTCGGCCTAACCTTAGAACACATTTGTAAGTGAATACAGTGTTCATTTGTACAGAA
TAGTTAGAATATTCTATTAAAGTGGTGAAACATTG

WO 2004/030615

PCT/US2003/028547

3403/6881
FIGURE 3137

CCGGGGCGGCGGTTGCATCAGATTCTAGGAAGTGTCTGTAGCCGCAGCTGCGGGTCCGGGATTCCCAGGCCATGGC
AGATTCTCCGGGCAGCAGGGCAAAGGCCGGCGTGTGCAGCCCCAGTGGTCCCCTCCTGCTGGGACCCAGCCATG
CAGACTCCACCTTTACAACAGCCTCACCAGGAACAAGGAAGTGTTCATACCTCAAGATGGGAAAAAGGTGACGTG
GTATTGCTGTGGGCCAACCGTCTATGACGCATCTCACATGGGGCACGCCAGGTCTACATCTCTTTTGATATCTT
GAGAAGAGTGTGAAGGATTACTTCAAATTTGATGTCTTTTATTGCATGAACATTACGGATATTGATGACAAGAT
CATCAAGAGGGCCCGCAGAACCACCTGTTTCGAGCAGTATCGGGAGAAGAGGCCTGAAGCGGCACAGCTCTTGGA
GGATGTTTCAGGCCGCCCTGAAGCCATTTTCAGTAAAATTAAATGAGACCACGGATCCCGATAAAAAGCAGATGCT
CGAACGGATTACGACGCAGTGCAGCTTGCCACAGAGCCACTTGAGAAAGCTGTGCAGTCCAGACTCACGGGAGA
GGAAGTCAACAGCTGTGTGGAGGTGTTGCTGGAAGAAGCCAAGGATTTGCTCTCTGACTGGCTGGATTCTACACT
TGGCTGTGATGTCACTGACAATTCCATCTTCTCCAAGCTGCCCAAGTTCTGGGAGGGGGACTTCCACAGAGACAT
GGAAGCTCTGAATGTTCTCCCTCCAGATGTCTTAACCCGGGTAGTGAGTATGTGCCAGAAATTGTGAACTTTGT
CCAGAAGATTGTGGACAACGGTTACGGCTATGTCTCCAATGGGTCTGTCTACTTTGATACAGCGAAGTTTGCTTC
TAGCGAGAAGCACTCCTATGGGAAGCTGGTGCCTGAGGCCGTTGGAGATCAGAAAGCCCTTCAAGAAGGGGAAGG
TGACCTGAGCATCTCTGCAGACCGCCTGAGTGAGAAGCGCTCTCCAACGACTTTGCCTTATGGAAGGCCTCTAA
GCCCCGAGAACCGTCCCTGGCCGTGCCCTTGGGGAAAGGGTCGTCCGGGTGGCATAICGAGTGTCTCGGCCATGGC
AGGCACCCCTCCTAGGGGCTTCGATGGACATTACGGAGGTGGGTTCGACCTCCGGTTCCCCACCATGACAATGA
GCTGGCACAGTCGGAGGCCCTACTTTGAAAACGACTGCTGGGTGAGGTACTTCCTGCACACAGGCCACCTGACCAT
TGCAGGCTGCAAAATGTCAAAGTCACTAAAAAATTCATCACCATTAAAGATGCCTTGAAAAAGCACTCAGCACG
GCAGTTGCGGCTGGCCTTCTCATGCACTCGTGGAAGGACACCCTGGACTACTCCAGCAACACCATGGAGTCAGC
GCTTCAATATGAGAAGTTCTTGAATGAGTTTTTCTTAAATGTGAAAGATATCCTTCGCGCTCCTGTTGACATCAC
TGGTCAGTTTGAGAAGTGGGGAGAAGAAGAAGCAGAACTGAATAAGAACTTTTATGACAAGAAGACAGCAATTCA
CAAAGCCCTCTGTGACAATGTTGACACCCGCACCGTCATGGAAGAGATGCGGGCCTTGGTCAGTCAGTGCAACCT
CTATATGGCAGCCCGGAAAGCCGTGAGGAAGAGGCCCAACCAGGCTCTGCTGGAGAACATCGCCCTGTACCTCAC
CCATATGCTGAAGATCTTTGGGGCCGTAGAAGAGGACAGCTCCCTGGGATTCCCGGTCGGAGGGCCTGGAACCAG
CCTCAGTCTCGAGGCCACAGTCATGCCCTACCTTCAGGTGTTATCAGAATTCGAGAAAGGAGTGCGGAAGATTGC
CCGAGAGCAAAAAGTCCCTGAGATTCTGCAGCTCAGCGATGCCCTGCGGGACAACATCCTGCCTGAGCTTGGGGT
GCGGTTTGAAGACCACGAAGGACTGCCCACAGTGGTGAACTGGTAGACAGAAACACCTTATTTAAAGAGAGAGA
AGAAAAGAGACGGGTGAAGAGGAGAAGAGGAAGAAGAAGAGGAGGCGGCCGGAGGAAACAGGAACAAGAAGC
AGCAAAGCTGGCCAAGATGAAGATTCCCCCAGTGAGATGTTCTTGTGAGAAACCGACAAATACTCCAAGTTTGA
TGAAAATGGTCTGCCCACACATGACATGGAGGGCAAAGAGCTCAGCAAAGGGCAAGCCAAGAAGCTGAAGAAGCT
CTTCGAGGCTCAGGAGAAGCTCTACAAGGAATATCTGCAGATGGCCCAGAATGGAAGCTTCCAGTGGAGGGGGCAC
AGGACTGACTTTTTAAACCATTGTGGACTAGTGGCTGCTGTCTGCCTCAGTGACAATGTCCAGCGCTCCTATCA
TGTTTACAGTCACCCTTGGGTCTAAATTAAGAGTTGTGTTTCATGTAGTTTCGTGTCGTCGTTGGCTCTGAGACA
TTGATAATAAATTTTTCTCAACAGTGAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3404/6881
FIGURE 3138

MADSSGQQGKRRVQPQWSPPAGTQPCRLHLYNSLTRNKEVFIPODGKKVTWYCCGPTVYDASHMGHARSYISFD
ILRRVLKDYFKFDVFYCMNITDIDDKIIKRARQNHLEQYREKRPEAAQLLEDVQAALKPFSVKLNETTDPDKKQ
MLERIQHAVQLATEPLEKAVQSRLTGEEVNSCDEVLLLEEAKDLLSDWLDSTLGCDVTDNSIFSKLPKFWEGDFHR
DMEALNVLPPDVLTRVSEYVPEIVNFVQKIVDNGYGYVSNQSVYFDTAKFASSEKHSYKLVPEAVGDQKALQEG
EGDLSISADRLSEKRSPNDFALWKASKPGEPSPWPCPWGKGRPGWHIECSAMAGTLLGASMDIHGGGFDLRFPHHD
NELAQSEAYFENDCWVRYFLHTGHLTIAGCKMSKSLKNFITIKDALKKHSARQLRLAFLMHSWKDTLDYSSNTME
SALQYEKFLNEFFLNVDILRAPVDITGQFEKWGEEEEAELENKNFYDKKTAIHKALCDNVDTRTVMEEMRALVSQC
NLYMAARKAVRKRPNQALLENIALYLTHMLKIFGAVEEDSSLGFPVGGPGTSLSLEATVMPYLQVLSEFREGVRK
IAREQKVPEILQLSDALRDNILPELGVRFEDEGLPTVVKLVDRNTLLKEREKRRVEEEKRKKKEEAARRKQEQ
EAAKLAKMKIPPSEMFLSETDKYSKFDENGLPTHMEGKELSKGQAKKLKLFEAQEKLYKEYLQMAQNGSFQ

WO 2004/030615

PCT/US2003/028547

3405/6881
FIGURE 3139

ATGTCCATCAGGGTAACCCAGAAGTCCTACGAGGTGTCCACCTCTAGCCCCCAGGACTTCAGCAGCCGCTCCTA
CACGAGTGGACCTGGTGCCTGCATCAGCTCCTCAAGCTTTTCCCCAGTGGTACCAGCAGCTTCCGGGGTAGCCTG
GGTGGAGGTTATGACAAGGTACGGTTCCTGGAGCAGCATAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAG
CAGCAGAAGACAGCTCGGAGCAACATGGACAACATGTTTCGAGAGCTACATCAACAACCTTAGGCGGCAACTGGAC
ACTCTGGGCCAGGAGAAGCTGAAGCTTGGCAACATGCAAGGGCTGATGGAGAAGTCAAGAACAAGTATGAGGAT
GAGATCAATAAGTGTGCAGAGCTGGAGAATGAATTTGTCCTCATCAAGAAGGATGTGGATGAAGCTAACATGAAC
AAGGTAGAGCTGGAGTCTCTCCTGGAAGGGCTGACTGACGAGATCAACTTCCTCAGGCAGCTGTATGAAGAGGAG
ATCCCAGAGCTGCAGTCCCAGATTTTCGGACACATCTGTGGTGCTGTCCATGGACAGCAGCCGCTCCCTGGACATG
GACAACACTATCGCTGAGGTCAAGGCGCAGTACAAGGTGATCTCCAACCGCAGCCGGGCGGAGGCTGAGAGCATG
CACCAGATCAACTCCTTCAGCCACACCAGCTCCACCAGGGCCGTGGTTGTGAAGAATATCGAGACCCACGAAGGG
AAGCTGGTGTCCGAGTCCTCTGACGTCCTGCCCAAGTGA

WO 2004/030615

PCT/US2003/028547

3406/6881
FIGURE 3140

MSIRVTQKSYEVSTSSPPGLQQPLLHEWTWCLHQLLKLFPSTSSFRGSLGGGYDKVRFLEQHNKMLETKWSLLQ
QQKTARSNMDNMFESYINNLRRLDTLGQEKLLGNMQGLMENCKNKYEDEINKCAELENEFVLIKKDVDEANMN
KVELESLLLEGLTDEINFLRQLYEEEIPELQSQISDTSVVLSDSSRSLMDNTIAEVKAQYKLHGYQELMKVKLA
LDIEIATYRKLLDGEESRLDSFSHTSSTRAVVVKNIETHEGKLVSESSDVLPK

WO 2004/030615

PCT/US2003/028547

3407/6881
FIGURE 3141

GGGAAGGGGATTGATTGTTGCGCCTCTGCTCTGAAGAAAGTGCTGTCTGGCTCCAACTCCAGTTCTTTCCCCT
GAGCAGCGCCTGGAACCTAACCTTCCCCTCTGTACCTTCTCGATCCCGCCGGCGCTTTAGAGCCGCGAGTCCA
GTCTTGGATCCTTCAGAGCCTTAGCCACTAGCTGCGATGCATGTGATCAAGCGAGATGGCCGCCAAGAACGAGTC
ATGTTTGACAAAATTACATCTCGAATCCAGAAGCTTTGTTATGGACTCAATATGGATTTTGTGATCCTGCTCAG
ATCACCATGAAAGTAATCCAAGGCTTGACAGTGGGGTCACCACAGTGGAAGTACTTGGCTGCTGAAACA
GCTGCAACCTTGACTACTAAGCACCTGACTATGCTATCCTGGCAGCCAGGATCGCTGTCTCTAAGTGCACAAA
GAAACAAAAGAAAGTGTTCAAGTATGTGATGGAAGACCTCTATAACTACATAAATCCACATAATGGCAAACACTCT
CCCATGGTGGCCAAGTCAACATTGGATATTGTTCTGGCCAATAAAGATCGCCTGAATTCTGCTATTATCTATGAC
CGAGATTTCTCTTACAATTACTTCGGCTTTAAGACGCTAGAGCGGTCTTATTTGTTGAAGATCAATGGAAAAGTG
GCTGAAAGACCACAACATATGTTGATGAGAGTATCTGTTGGGATCCACAAAGAAGACATTGATGCAGCAATTGAA
ACATATAATCTTCTTTCTGAGAGGTGGTTTACTCATGCTTCGCCACTCTCTTCAATGCTGGTACCAACCGCCCA
CACTTTCTAGCTGTTTTCTTCTGAGTATGAAAGATGACAGCATTGAAGGCATTTATGACACTCTAAAGCAATGT
GCATTGATTTCTAAGTCTGCTGGAGGAATTGGTGTGCTGTGAGTTGATTTCGGGCTACTGGCAGCTACATTGCT
GGGACTAATGGCAATTCCAATGGCCTTGACCGATGCTGAGAGTATATAACAACACAGCTCGATATGTGGATCAA
GGTGGGAACAAGCGTCTGGGGCATTGCTATTTACCTGGAGCCTTGGCATTAGACATCTTTGAATTCCTTGAT
TTAAAGAAGAACACAGGAAAGGAAGAGCAGCGTGCCAGAGATCTTTTCTTTGCTCTTTGGATTCCGGATCTCTTC
ATGAAACGAGTGGAGACTAATCAGGACTGGTCTTTGATGTGTCCAAATGAGTGTCTGGTCTGGATGAGGTTTGG
GGAGAGGAATTTGAGAACTATATGCAAGTTATGAGAAACAAGGTCGTGTCCGCAAAGTTGTAAAAGCTCAGCAG
CTTTGGTATGCCATCATTGAGTCTCAGACGGAACAGGCACCCCGTATATGCTCTACAAAGATTCTGTAAATCGA
AAGAGCAACCAGCAGAACCTGGGAACCATCAAATGCAGCAACCTGTGCACAGAAATAGTGGAGTACACCAGCAAA
GATGAGGTTGCTGTTTGAATTTGGCTTCCCTGGCCCTGAATATGTATGTACATCAGAACACACATACGACTTT
AAGAAGTTGGCTGAAGTCACTAAAGTCGTGTGCGAAACTTGAATAAAATTATTGATATAAACTACTATCCTGTA
CCAGAGGCATGCCTATCAAATAAACGCCATCGCCCCATTGGAATTGGGGTACAAGGTCTGGCAGATGCTTTTATC
CTGATGAGATACCTTTTGAGAGTGCAGAAGCCAGTTACTGAATAAGCAGATCTTTGAAACTATTTATTATGGT
GCTCTGGAAGCCAGCTGTGACCTTGCCAAGGAGCAGGGCCCATACGAAACCTATGAGGGCTCTCCAGTTAGCAAA
GGAATTCCTCAGTATGATATGTGAATGTTACTCTACAGACCTATGGGACTGGAAGGTTCTCAAGGAGAAGATT
GCAAAGTATGGTATAAGAAACAGTTTACTTATTGCCCCGATGCCTACAGCTTCCACTGCTCAGATCCTGGGGAAT
AATGAGTCCATTGAACCTTACACCAGCAACATCTATACTCGCAGAGTCTTGTGAGGAGAATTTAGATTGTAAAT
CCTCACTTATTGAAAGATCTTACCGAGCGGGCCCTATGGCATGAAGAGATGAAAAACCAGATTATTGCATGCAAT
GGCTCTATTACAGAGCATACCAGAAAATCCTGATGACCTGAAGCAACTTTATAAACTGTGTGGGAAATCTCTCAG
AAAACGTGTTCTCAAGATGGCAGCTGAGAGAGGTGCTTTCATTGATCAAAGCCAATCTTTGAACATCCACATTGCT
GAGCCTAACTATGGCAAACCTACTAGTATGCACTTCTACGGCTGGAAGCAGGGTTTGAAGACTGGGATGTATTAT
TTAAGGACAAGACCAGCGGCTAATCCAATCCAGTTCACTCTAAATAAGGAGAAGCTAAAAGATAAAGAAAAGGTA
TCAAAGAGGAAGAAGAGAAGGAGAGGAACACAGCAGCCATGGTGTGCTCTTTGGAGAATAGAGATGAATGTCTG
ATGTGTGGATCCTGAGGAAAGACTTGGAAGAGACCAGCATGTCTTCAGTAGCCAACTACTTCTTGAGCATAGAT
AGGTATAGTGGGTTTGCTTGAGGTGGTAAGGCTTGTGACCCCTGTTGCAGGCAAAAGGAGTAATTGATTTAAA
GTACTGTTAATGATGATAATGATTTTTTTTTTAACTCATATATTGGGATTTTCACCAAAATAATGCTTTTGAAA
AAAAGAAAAAAAACGGATATATTGAGAATCAAAGTAGAAGTTTTAGGAATGCAAAATAAGTCATCTTGATAC
AGGGAGTGGTTAAGTAAGGTTTCATCACCCCTTAGCACTGCTTTCTGAAGACTTCAGTTTGTAAAGGAGATT
TAGTTTTACTGCTTTGACTGGTGGGTCTCTAGAAGCAAACTGAGTGATAACTCATGAGAAGTACTGATAGGACC
TTTATCTGGATATGGTCCATAGGTTATTCTGAAATAAAGATAAACATTTCTAAGTG

WO 2004/030615

PCT/US2003/028547

3408/6881
FIGURE 3142

ACACTCGCTTCTGGAACGTCTGAGATTATCAATAAGCTCCTAGTCCAGACGCCATGGGTCATTTCACAGAGGAGG
ACAAGGCTACTATCACAAAGCCTGTGGGGCAAGGTGAATGTGGAAGATGCTGGAGGAGAAACCCTGGGAAGGCTCC
TGGTTGTCTACCCATGGACCCAGAGGTTCTTTGACAGCTTTGGCAACCTGTCCTCTGCCTCTGCCATCATGGGCA
ACCCCAAAGTCAAGGCACATGGCAAGAAGGTGCTGACTTCCTTGGGAGATGCCATAAAGCACCTGGATGATCTCA
AGGGCACCTTTGCCAGCTGAGTGAAGTGCAGTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGG
GAAATGTGCTGGTGACCGTTTTGGCAATCCATTTTCGGCAAAGAATTCACCCCTGAGGTGCAGGCTTCCTGGCAGA
AGATGGTGACTGCAGTGGCCAGTGCCCTGTCCTCCAGATACCACTGAGCCTCTTGCCCATGATTCAGAGCTTTCA
AGGATAGGCTTTATTCTGCAAGCAATACAAATAATAAATCTATTCTGCTGAGAGATCAC

WO 2004/030615

PCT/US2003/028547

3409/6881
FIGURE 3143

MGHFTEEDKATITSLWGKVNVEDAGGETLGRLLVVYPWTQRFFDSFGNLSSASAIMGNPKVKAHGKKVLTSLGDA
IKHLDDLKGTFAQLSELHCDKLHVDPENFKLLGNVLVTVLAIHFGKEFTPEVQASWQKMTAVASALSSRYH

WO 2004/030615

PCT/US2003/028547

3410/6881
FIGURE 3144

ACACTCGCTTCTGGAACGTCTGAGGTTATCAATAAGCTCCTAGTCCAGACGCCATGGGTCATTTACAGAGGAGG
ACAAGGCTACTATCACAAAGCCTGTGGGGCAAGGTGAATGTGGAAGATGCTGGAGGAGAAACCCCTGGGAAGGCTCC
TGGTTGTCTACCCATGGACCCAGAGGTTCTTTGACAGCTTTGGCAACCTGTCCTCTGCCTCTGCCATCATGGGCA
ACCCCAAAGTCAAGGCACATGGCAAGAAGGTGCTGACTTCCTTGGGAGATGCCATAAAGCACCTGGATGATCTCA
AGGGCACCTTTGCCCAGCTGAGTGAAGTGCAGTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGG
GAAATGTGCTGGTGACCGTTTTGGCAATCCATTTCGGCAAAGAATTACCCCTGAGGTGCAGGCTTCCTGGCAGA
AGATGGTGACTGGAGTGGCCAGTGCCCTGTCTCCAGATAACCACTGAGCTCACTGCCCCATGATGCAGAGCTTTCA
AGGATAGGCTTTATTCTGCAAGCAATACAAATAATAAATCTATTCTGCTAAGAGATCAC

WO 2004/030615

PCT/US2003/028547

3411/6881
FIGURE 3145

MGHFTTEEDKATITISLWGKVNVEDAGGETLGRLLVVYPWTQRFFDSFGNLSSASAIMGNPKVKAHGKKVLTSLGDA
IKHLDDLKGTFAQLSELHCDKLHVDPENFKLLGNVLVTVLAIHFGKEFTPEVQASWQKMVTGVASALSSRYH

WO 2004/030615

PCT/US2003/028547

3412/6881
FIGURE 3146

CAACAAAAAAGAGCCTCAGGATCCAGCACACATTATCACAAACTTAGTGTCCATCCATCACTGCTGACCCTCTCC
GGACCTGACTCCACCCCTGAGGACACAGGTGAGCCTTGACCAATGACTTTTAAGTACCATGGAGAACAGGGGGCC
AGAACTTCGGCAGTAAAGAATAAAAGGCCAGACAGAGAGGCAGCAGCACATATCTGCTTCCGACACAGCTGCAAT
CACTAGCAAGCTCTCAGGCCTGGCATCATGGTGCATTTTACTGCTGAGGAGAAGGCTGCCGTCCTAGCCTGTGG
AGCAAGATGAATGTGGAAGAGGCTGGAGGTGAAGCCTTGGGCAGACTCCTCGTTGTTTACCCCTGGACCCAGAGA
TTTTTTGACAGCTTTGGAAACCTGTCGTCTCCCTCTGCCATCCTGGGCAACCCCAAGGTCAAGGCCCATGGCAAG
AAGGTGCTGACTTCCCTTTGGAGATGCTATTAAAAACATGGACAACCTCAAGCCCGCCTTTGCTAAGCTGAGTGAG
CTGCACTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGGGTAACGTGATGGTGATTATTCTGGCT
ACTCACTTTGGCAAGGAGTTTACCCCTGAAGTGCAGGCTGCCTGGCAGAAGCTGGTGTCTGCTGTCGCCATTGCC
CTGGCCCATAAGTACCACTGAGTTCTCTTCCAGTTTGAGGTCTTCTGTGACCCTGACACCCTCCTTCTGCACA
TGGGGACTGGGCTTGGCCTTGAGAGAAAGCCTTCTGTTTAATAAAGTACATTTTCTTCAGTAATC

WO 2004/030615

PCT/US2003/028547

3413/6881
FIGURE 3147

MVHFTAEKAAVTSLWSKMNVEEAGGEALGRLLVVYPWTQRFFDSFGNLSSPSAILGNPKVKAHGKKVLTSFGDA
IKNMDNLKPAFAKLSELHCDKLHVDPENFKLLGNVMVILATHFGKEFTPEVQAAWQKLVSVAIALAHKYH

WO 2004/030615

PCT/US2003/028547

3414/6881
FIGURE 3148

CTCTTCTCCCCTGATTCAAGACTCCTCTGCTTTGGACTGAAGCACTGCAGGAGTTTGTGACCAAGAACTTCAAGA
GTCAAGACAGAAGGAAGCCAAGGGAGCAGTGCAATGGATTTCTCAGTAAAGGTAGACATAGAGAAGGAGGTGACC
TGCCCCATCTGCCTGGAGCTCCTGACAGAACCCTCTGAGCCTAGATTGTGGCCACAGCTTCTGCCAAGCCTGCATC
ACTGCAAAGATCAAGGAGTCAGTGATCATCTCAAGAGGGGAAAGCAGCTGTCCTGTGTGTCAGACCAGATTCAG
CCTGGGAACCTCCGACCTAATCGGCATCTGGCCAACATAGTTGAGAGAGTCAAAGAGGTCAAGATGAGCCACAG
GAGGGGCAGAAGAGAGATGTCTGTGAGCACCACGGAACCACTCCAGATCTTCTGTAAGGAGGATGGAAAAGTC
ATTTGCTGGGTTTGTGAAGTGTCTCAGGAACACCAAGGTACCAAAACATTCCGCATAAACGAGGTGGTCAAGGAA
TGTCAGGAAAAGCTGCAGGTAGCCCTGCAGAGGCTGATAAAGGAGAATCAAGAGGCTGAGAAGCTGGAAGATGAC
ATCAGACAAGAGAGAACCGCTGGAAGATCGAGAGACAGAAGATTCTGAAAGGGTTCAATGAAATGAGAGTCATC
TTGGACAATGAGGAGCAGAGAGAGCTGCAAAGCTGGAGGAAGGTGAGGTGAATGTGCTGGATAACCTGGCAGCA
GCTACAGACCAGCTGGTCCAGCAGAGGCAGGATGCCAGCAGCTCATCTCAGATCTCCAGCGGAGGTTGACGGGA
TCGTCAGTAGAGATGCTGCAGGATGTGATTGACGTCATGAAAAGGAGTGAAAGCTGGACATTGAAGAAGCCAAAA
TCTGTTTCCAAGAACTAAAGAGTGTATTCCGAGTACCAGATCTGAGTGGGATGCTGCAAGTTCTTAAAGAGCTG
ACAGATGTCCAGTACTACTGGGTGGACGTGATGCTGAATCCAGGCAGTGCCACTTCGAATGTTGCTATTTCTGTG
GATCAGAGACAAGTGAAGAACTGTACGCACCTGCACATTTAAGAATTCAAATCCATGTGATTTTTCTGCTTTTGGT
GTCTTCGGCTGCCAATATTTCTCTTCGGGGAAATATTACTGGGAAGTAGATGTGTCTGGAAAGATTGCCTGGATC
CTGGGCGTACACAGTAAATAAGTAGTCTGAATAAAAGGAAGAGCTCTGGGTTTGTCTTTTGATCCAAGTGTAAT
TATTCAAAAGTTTACTCCAGATATAGACCTCAATATGGCTACTGGGTTATAGGATTACAGAATACATGTGAATAT
AATGCTTTTGAGGACTCCTCCTCTCTGATCCCAAGGTTTTGACTCTCTTTATGGCTGTGCTCCCTGTGCTATTG
GGGTTTTCTAGACTATGAGGCAGGCATTGTCTCATTTTTCAATGTACAAACCACGGAGCACTCATCTACAAGT
TCTCTGGATGTGCTTTTCTCGACCTGCTTATCCGTATTTCAATCCTTGGAACTGCCTAGTCCCCATGACTGTGT
GCCCCACGAGCTCCTGAGTGTTCTCATTCTTTACCCACTTCTGCATAGTAGCCCTTGTGCTGAGACTCAGATTC
TGCACCTGAGTTTATCTCTACTGAGACCATCTCTTCTTTCTTTCCCTTCTTTTACTTAGAATGTCTTTGTATT
CATTTGCTAGGGCTTCCATAGCAAAGCATCATAGATTGCTGATTTAACTGTAATTGTATTGCCGTACTGTGGGC
TGGAAATCCCAAATCTAGATTCCAGCAGAGTTGGTTCTTTCTGAGGTCTGCAAGGAAGGGCTGTGTTCCATGCCCT
CTCTCCTTGGCTTGTAGAAGGCATCTTGTCCCTATGACTCTTCACATTGTCTTTATGTACATCTCTGTGCCCAG
TTTTCCCTTTTTTATTAAGACACCAGTCATACTGGCTCAGGGCCACCGCTAATGCCTTAATGAAATCATTTTAAC
ATTATATTCTCTACAAAGACCTTATTTCCAAATAAGATAATATTTGGAGGTATTGGGAATAAAACTCCAACATA
TAAATTTGAGGAAGGCACGATTTCACTCATAACAATCTTACCCTTTCTTGCAAGAGATGCTTGTACATAATTTTC
CTAATACCTTGGTTTCACTAGTAGTAAACATTATTATTTTTTTATATTTGCAAAGGAAACATATCTAATCCTTC
CTATAGAAAGAACAGTATTGCTGTAATGTCTTTTCTTTTCTTCTCCTCATTTCCTCTGCCCCCTTAAAGATTGAAG
AAAGAGAACTTGTCAACTCATATCCACGTTATCTAGCAAAGTACATAAGAATCTATCACTAAGTAATGTATCCT
TCAGAATGTGTTGGTTTACCAGTGACACCCCATATTATCACAAAATTAAAGCAAGAAGTCCATAGTAATTTAT
TGCTAATAGTGGATTTTTAATGCTCAGAGTTTCTGAGGTCAAATTTTATCTTTTCACTTACAAGCTCTATGATCT
TAAATAATTTACTTAATGTATTTTGGTGTATTTTCTCAAATTAATATTGGTGTTCAGACTATATCTAATTCCT
CTGATCACTTTGAGAAACAACTTTTATTAATGTAAGGCACTTTCTATGAATTTTAAATATAAAAAATAATAT
TGTTCTGATTATTACTGAAAAGATGTCAGCCATTTCAATGTCTTGGGAACAATTTTTTGTTTTTGTCTGTTTT
CTTTTTGCTTCAATAAAACAATAGCTGGCTCT

WO 2004/030615

PCT/US2003/028547

3415/6881
FIGURE 3149

GGCACGAGGCTGAGCGCTCCGACTTCCAGAGGAGCGCTGTGCACGTGGAGAAGAGCGGGGACTCGGCGACCCCTGC
CCTCCCAGACCTCATGTTTCGAAGAGCCTGAGTGGGCCGAGGCGGCCCCAGTAGCCGCGGGCCTTGGGCCCGTAAT
CTCACGACCTCCGCCTGCGGCCTCCTCGCAAAACAAGGGCTCCAAGCGCCGCCAGCTCTTGGCCACATTACGGGC
CCTAGAGGCAGCATCTCTTTCCAGCATCCCCCAGCCTATGTATAAGTGAAGTCTGAGGAGGAGGAGGAGGAAAG
GAAGAAGAAATGCCCAAAAAGGCATCATTGTCAGTGCCTCTGCTGAAGTAGGGAAGAAAGGGAAGAAGAAATG
TCAAAAACAGGGCCACCTTGCACTGACTCTGAGGAAGAAGTAGAAAGGAAGAAGAAATGCCACAAACAGGCTCT
TGTTGGCAGTGAAGTCTGCTGAAGATGAGAAAAAGAAAGAGGAAATGCCAGAAACATGCCCCATAAAATTCAGCCCA
GCACCTGGACAATGTTGACCAAAACAGGTCCCAAGCCTGGAAGGGTAGTACTACAAATGATCCACCAAGCAAAG
CCCTGGGTCCACTTCCCCTAAACCCCTCATACATTAAGCCGCAAGCAGTGGCGGAACCGGCAAAAGAATAAGAG
AAGATGTAAGAACAAGTTTCAGCCACCTCAGGTGCCAGACCAGGCCCCAGCTGAGGCCCCACAGAGAAGACAGA
GGTGTCTCCTGTTCCCAGGACAGACAGCCATGAGGCTCGGGCAGGGGCTTTGCGAGCCCGCATGGCACAGCGGCT
GGATGGGGCCCGATTTCGCTACCTCAATGAACAGTTGTACTCAGGGCCCAGCAGTGTCTGCACAGCGTCTCTTCCA
GGAAGACCCTGAGGCTTTTCTTCTTACCACCGCGGCTTCAGAGCCAAGTGAAGAAGTGGCCACTGCAGCCAGT
GGACCGCATCGCCAGGGATCTTCGCCAGCGGCTGCATCCCTAGTGGTGGCTGACTTCGGCTGTGGGGATTGCCG
CTTGGCTTCAAGTATCCGGAACCTGTGCATTGCTTTGACTTGGCTTCTCTGGACCCTAGGGTCACTGTGTGTGA
CATGGCCCAGGTTCTCTGGAGGATGAGTCTGTGGATGTGGCTGTGTTTGCCTTTCACTGATGGGAACCAACAT
CAGGGACTTCCTAGAGGAGGCAATAGAGTACTGAAGCCAGGGGGTCTCCTGAAAGTGGCTGAGGTGAGCAGCCG
CTTTGAGGATGTTTGAACCTTTCTGCGGGCTGTGACCAAGCTAGGCTTCAAGATTGTCTCCAAGGACCTGACCAA
CAGCCATTTCTTCTTGTGTTGATTTCCAAAAGACTGGGCCCCCTCTGGTAGGGCCCAAGGCTCAGCTTTCAGGCCT
GCAGCTTCAGCCATGTCTCTACAAGCGCAGGTGACTCTGGATCTTCCTTGAAAGGGGAGGCAGATCTCAAATC
CAGGCTCAGAACTGTGAAGACTGTTTCCAGCCTGGCTGTGAGCCAAGACCTGGTTCTGGTGGACCTGAGGACA
AAGTGTGATAAAACCTCTGGCTCAGACTTGCTCTACTGAAGGCTTCTTGGTTATAAGATGCATAAAGTCACTGGG
GCTAGCTAAACAATAAAGAGTTTATTGTGAGAAAAA

WO 2004/030615

PCT/US2003/028547

3416/6881
FIGURE 3150

MFEEPEWAEAAFVAAGLGPVISRPPPAASSQNKGSKRRLATLRALEAASLSQHPPSLCISDSEEEEEERKKKC
PKKASFASASAEVGKKGKKKCQKQGPPCSDSEEEVERKKKCHKQALVGSDSAEDEKRKRKCQKHAPINSAQHLDN
VDQTGPKAWKGSTTNDPPKQSPGSTSPKPPHTLSRKQWRNRQKNKRRCKNKFQPPQVPDQAPAEAPTEKTEVSPV
PRDTSHEARAGALRARMQRLDGARFRYLNEQLYSGPSSAAQRLFQEDPEAFLLYHRGFQSQVKKWPLQPVDRIA
RDLRQRPASLVVADFGCGDCRLASSIRNPVHCFDLASLDPRVTVCDMAQVPLEDESVDVAVFCLSLMGTNIRDFL
EEANRVLKPGGLLKVAEVSSRFEDVRTFLRAVTKLGFKIVSKDLTNSHFFLFDFQKTGPPLVGPKAQLSGLQLQP
CLYKRR

WO 2004/030615

PCT/US2003/028547

3417/6881
FIGURE 3151

ACGGGAGTTCCCCGGAGAAGGATCCTGCAGCCCGAGTCCCAGGATAAAGCTTGGGGTTCATCCTCCTTCCCTGG
ATCACTCCACAGTCCTCAGGCTTCCCCAATCCAGGGGACTCGGCGCCGGGACGCTGCTATGGACGACATTTTCAC
TCAGTGCCGGGAGGGCAACGCAGTCGCCGTTTCGCCTGTGGCTGGACAACACGGAGAACGACCTCAACCAGGGGGA
CGATCATGGCTTCTCCCCCTTGCACTGGGCCTGCCGAGAGGGCCGCTCTGCTGTGGTTGAGATGTTGATCATGCCG
GGGGGCACGGATCAATGTAATGAACCGTGGGGATGACACCCCTGCATCTGGCAGCCAGTCATGGACACCGTGA
TATTGTACAGAAGCTATTGCAGTACAAGGCAGACATCAATGCAGTGAATGAACATGGGAATGTGCCCTGCCTA
TGCTGTTTTTTGGGGCCAAGATCAAGTGGCAGAGGACCTGGTGGCAAATGGGGCCCTTGTGAGCATCTGTAACAA
GTATGGAGAGATGCCTGTGGACAAAGCCAAGGCACCCCTGAGAGAGCTTCTCCGAGAGCGGGCAGAGAAGATGGG
CCAGAATCTCAACCGTATTCCATACAAGGACACATTCTGGAAGGGGACCACCCGCACTCGGCCCCGAAATGGAAC
CCTGAACAAACACTCTGGCATTGACTTCAAACAGCTTAACCTCCTGACGAAGCTCAACGAGAATCACTCTGGAGA
GCTATGGAAGGGCCGCTGGCAGGGCAATGACATTGTCTGTAAGGTGCTGAAGGTTTCGAGACTGGAGTACAAGGAA
GAGCAGGGACTTCAATGAAGAGTGTCGCCGGCTCAGGATTTTCTCGCATCCAAATGTGCTCCAGTGCTAGGTGC
CTGCCAGTCTCCACCTGCTCCTCATCCTACTCTCATCACACACTGGATGCCATATGGATCCCTCTACAATGTACT
ACATGAAGGCACCAATTTCTGTCGTGGACCAGAGCCAGGCTGTGAAGTTTGCTTTGGACATGGCAAGGGGCATGGC
CTTCCTACACACACTAGAGCCCCTCATCCCAGACATGCACTCAATAGCCGTAGTGTAAATGATTGATGAGGACAT
GACTGCCCCGAATTAGCATGGCTGATGTCAAGTTCTCTTTCCAATGTCTGGTTCGCATGTATGCACCTGCCTGGGT
AGCCCCGAAGCTCTGCAGAAGAAGCCTGAAGACACAAACAGACGCTCAGCAGACATGTGGAGTTTTCAGTGCT
TCTGTGGGAAGTGGTGACACGGGAGGTACCCTTTGCTGACCTCTCCAATATGGAGATTGGAATGAAGGTGGCATT
GGAAGGCCTTCGGCCTACCATCCCACCAGGTATTTCCCCTCATGTGTGTAAGCTCATGAAGATCTGCATGAATGA
AGACCTGCAAAGCGACCCAAATTTGACATGATTGTGCCTATCCTTGAGAAGATGCAGGACAAGTAGGACTGGAA
GGTCCTTGCTGAACTCCAGAGGTGTCGGGACATGGTTGGGGGAATGCACCTCCCCAAAGCAGCAGGCCTCTGGT
TGCTCCCCCGCCTCCAGTCATGGTACTACCCAGCCATGGGGTCCATCCCCTTCCCCCATCCCTACCACTGTGG
CCCCAAGAGGGGCGGGCTCAGAGCTTTGTCACTTGCCACATGGTGTCTCCAACATGGGAGGGATCAGCCCCGCC
TGTCACAATAAGTTTATTATG

WO 2004/030615

PCT/US2003/028547

3418/6881
FIGURE 3152

ACATGACAGCAGATCCGCGGAAGGGCAGAATGGGACTCCAAGCCTGCCTCCTAGGGCTCTTTGCCCTCATCCTCT
CTGGCAAATGCAGTTACAGCCCGAGCCCGACCAGCGGAGGACGCTGCCCCAGGCTGGGTGTCCCTGGGCCGTG
CGGACCCTGAGGAAGAGCTGAGTCTCACCTTTGCCCTGAGACAGCAGAATGTGGAAAGACTCTTGAGCTGGTGC
AGGCTGTGTGCGATCCAGCTCTCCTCAATACGGAATAACCTGACCCTAGAGAATGTGGCTGATCTGGTGAGGC
CATCCCCACTGACCCTCCACACGGTGCAAAAATGGCTCTTGGCAGCCGGAGCCCAGAAGTGCCATTCTGTGATCA
CACAGGACTTTCTGACTTGCTGGCTGAGCATCCGACAAGCAGAGCTGCTGCTCCCTGGGGCTGAGTTTCATCACT
ATGTGGGAGGACCTACGGAGACCCATGTTGTAAGGTCCCCACATCCCTACCAGCTTCCACAGGCCTTGGCCCCC
ATGTGGACTTTGTGGGGGGACTGCACCGTTTTTCCCCAACATCATCCCTGAGGCAACGTCCTGAGCCGAGGTGA
CAGGGACTGTAGGCCTGCATCTGGGGGTAACCCCTCTGTGATCCGTAAGCGATACAACCTTGACCTCACAAGACG
TGGGCTCTGGCACCAGCAATAACAGCCAAGCCTGTGCCAGTTTCTGGAGCAGTATTTCCATGACTCAGACCTGG
CTCAGTTTCATGCGCCTCTTCCGGTGGCAACTTTGCACATCAGGCATCAGTAGCCCGTGTGGTTGGACAACAGGGCC
GGGGCCGGGCCGGGATTGAGGCCAGTCTAGATGTGCAGTACCTGATGAGTGCTGGTGCCAACATCTCCACCTGGG
TCTACAGTAGCCCTGGCCGGCATGAGGGACAGGAGCCCTTCTGCAGTGGCTCATGCTGCTCAGTAATGAGTCAG
CCCTGCCACATGTGCATACTGTGAGCTATGGAGATGATGAGGACTCCCTCAGCAGCGCCTACATCCAGCGGGTCA
ACACTGAGCTCATGAAGGCTGCCGCTCGGGGTCTCACCTGCTCTTCGCCTCAGGTGACAGTGGGGCCGGGTGTT
GGTCTGTCTCTGGAAGACACCAGTTCCGCCCTACCTTCCCTGCCTCCAGCCCCATGTCACCACAGTGGGAGGCA
CATCCTTCCAGGAACCTTTCTCATCACAATGAAATTGTTGACTATATCAGTGGTGGTGGCTTCAGCAATGTGT
TCCCACGGCCTTCATACCAGGAGGAAGCTGTAACGAAGTTCCTGAGCTCTAGCCCCACCTGCCACCATCCAGTT
ACTTCAATGCCAGTGGCCGTGCCTACCCAGATGTGGCTGCACCTTTCTGATGGCTACTGGGTGGTCAGCAACAGAG
TGCCCATTCATGGGTGTCCGGAACCTCGGCCCTACTCCAGTGTGTTGGGGGGATCCTATCCTTGATCAATGAGC
ACAGGATCCTTAGTGGCCGCCCCCTCTTGGCTTTCTCAACCCAAGGCTCTACCAGCAGCATGGGGCAGGACTCT
TTGATGTAACCCGTGGCTGCCATGAGTCTGTCTGGATGAAGAGGTAGAGGGCCAGGGTTTCTGCTCTGGTCTCTG
GCTGGGATCCTGTAACAGGCTGGGGAACACCCAACCTTCCCAGCTTTGCTGAAGACTCTACTCAACCCCTGACCCT
TTCTATCAGGAGAGATGGCTTGTCCCTGCCCTGAAGCTGGCAGTTCAGTCCCTTATTCTGCCCTGTTGGAAGC
CCTGCTGAACCTCAACTATTGACTGCTGCAGACAGCTTATCTCCCTAACCTGAAATGCTGTGAGCTTGACTTG
ACTCCCAACCCCTACCATGCTCCATCATACTCAGGTCTCCCTACTCCTGCCTTAGATTCTCAATAAGATGCTGTA
ACTAGCATTTTTTTGAATGCCTCTCCCTCCGCATCTCATCTTTCTCTTTCAATCAGGCTTTTCCAAAGGGTTGTA
TACAGACTCTGTGCACTATTTCACTTGATATTCATCCCCAATTCAGTGAAGGAGACCTCTACTGTCACCGTTT
ACTCTTTTCTACCCTGACATCCAGAAACAATGGCCTCCAGTGCATACTTCTCAATCTTTGCTTTATGGCCTTTCC
ATCATAGTTGCCCACTCCCTCTCCTTACTTAGCTTCCAGGTCTTAACCTCTCTGACTACTCTTGCTCTTCTCTCT
CATCAATTTCTGCTTCTTCATGGAATGCTGACCTTCATTGCTCCATTGTAGATTTTGTCTCTCTCAGTTTACT
CATTGTCCCCTGGAACAAATCACTGACATCTACAACCATACCATCTCACTAAATAAGACTTTCTATCCAATAAT
GATTGATACCTCAAATGTAAGATGCGTGATACTCAACATTCATCGTCCACCTTCCCAACCCCAACAATTCAT
CTCGTTTCTTCTTGGTAAATGATGCTATGCTTTTCCAACCAAGCCAGAAACCTGTGTCATCTTTTACCCCCACC
TTCAATCAACAAGTCTCAATCAACAAGTCTTACTGACTGCACATCTTAAATATATCTTTATCAGTCCACAAGTC
CTTCCAATTATATTTCCCAAGTATATCTAGAACCTATCCACTTATATCCCCACTGCTACTACCTTAGTTTAGGGC
TATATTCTCTTGAAAAAAGTGTCCTTACTTCTGCCAATCCCCAAGTCATCTTCCAGAGTAAATGCAATCCC
ATCAGGCCACTTGGATGAAAACCCCTTCAAGGATTACTGGATAGAATTCAGGCTTTCCCTCCACCCCCCAATCAT
AGCTCACAAACCTTCCCTTGCTATTTGTTCTTAAGTAAAAAATCATTTTTCTCTCTCCCTCCCCAAACCCCAAGGA
ACTCTCACTCTTGCTCAAGCTGTTCCGTCCCCTTACCACCCCTGATACAACCTGCCAGGTTAATTTCCAGAATTCT
TGCAAGACTCAGTTCAGAACTCACCTTCTTTTCGTGAATGTTTTGATTCCCTGAGGCTACTTTATTTTGGTATGGC
TGAAAAATCCTAGATTTTCTAAACAAAACCTGTTTGAATCTTGGTTCTGATATGGACTAGGAGAGAGACTGGGTC
AAGTAAGCTTATCTCCCTGAGGCTGTTTCCCTCGTCTGTAAAGTGTGAATATCAATACCTGCCTTTTCATAATCACC
AGGGAATAAAGTGGAATAATGTTGATAACAGTGCTTGGCACCTGGAAGTAGGTGGCAGATGTTAACGCCCTTCT
CCCTTGCACTGCGCCCCCTGTGCCTACCTCTAGCATTGTAACGACCACATAGTATTGAAATGGCCAGTTTACTTG
TCTGCCTTCCCTTCCAAGACCGTTGGTGCCTAGAGGACTAGAATCGTGTCTTATTTAACTTTGTGTTCCAGGTC
CTAGCTCAGGAGTTGGCAAATAAGAATTAATGTCTGCTACACCGAAA

PCT/US2003/028547

GCTGTGCAGGAGGCGCGCGCCCGGGCGCTCAGCGGACGGACCGATCGCCGGCCAAGGGGCGCGCGGTCCGACGGCGGG
 TGCCCGGAGGGGATCGCGGGCCTCGGAGACAGCGACTGCGGACGATGCGCGGCTTCAGGCCCGCGCGAGCGGGC
 GCTGCCCGGGGGGCTGACCGCGGCGCGGACGGCGCCCGAGCACCGGGCGAGGGAGCCCCGCTGCGCGGAGGTCAG
 GGAGCCTGAGCTGGAGCCAGGGCCCCAGTGGGACCTGACCCAAAGTCTGAGGTCAAGCTGGGCCACAGCCTGGC
 CTGGAGCTGGAGCCCCAAGGCACAGCTGGACTACCCTTGTTCATGCAGAAGGAGCTGGGCATTGTGCCTTCCTGCC
 TGGCATGAAGAGCCCCAGGCCCCACCTCCTGCTACCATTGCTGCTGCTGCTGCTGCTGCTGCTGGGGGCTGGGGT
 GCCAGGTGCCTGGGGTCAAGCTGGGAGCCTGGACTTGCAGATTGATGAGGAGCAGCCAGCGGTACACTGATTGG
 CGACATCAGTGCGGGGCTTCCGGCAGGCACGGCAGCTCCTCTCATGTACTTCATCTCTGCCCAAGAGGGCAGCGG
 CGTGGGCACAGACCTGGCCATTGACGAACACAGTGGGGTCGTCCGTACAGCCCCTGTCTTGGACCGTGAGCAGCG
 GGACCGCTACCGCTTCACTGCAGTCACTCCTGATGGTGCCACCGTAGAAGTTACAGTGCGAGTGGCTGACATCAA
 CGACCATGCTCCAGCCTTCCCACAGGCTCGGGCTGCCCTGCAGGTACCTGAGCATAACAGCTTTTGGCACCCGCTA
 CCCACTGGAGCCTGCTCGTGATGCAGATGCTGGGCGTCTGGGAACCCAGGGCTATGCGCTATCTGGTGATGGGGC
 TGGAGAGACCTTCCGGCTGGAGACACGCCCCGGTCCAGATGGGACTCCAGTACCTGAGCTGGTAGTTACTGGGGA
 ACTGGACCGAGAGAACCCTCACACTATATGCTACAGCTGGAGGCCTATGATGGTGGTTACCCCCCGGAGGGC
 CCAGGCCCTGCTGGACGTGACACTGCTGGACATCAATGACCATGCCCGGCTTTCATCAGAGCCGCTACCATGC
 TGTGGTGTCTGAGAGCCTGGCCCCCTGGCAGTCTGTCTTGCAGGTGTTGCGATCTGATGCCGATGCTGGTGTCAA
 TGGGGCTGTGACTTACGAGATCAACCGGAGGCAGAGCGAGGGTGATGGACCTTCTCCATCGACGCACACACGGG
 GCTGCTGCAGTTAGAGCGGCCACTGGACTTTGAGCAGCGCGGGTCCATGAAGTGGTGGTGCAAGCAGCAGATGG
 TGGGGCTCACCTTGAGCTGGGCTCGGCCCTTGTGACTGTGCGATGTGCGAGATGCCAATGACAATCAGCCCTCCAT
 GACTGTTCATCTTTCTCAGTGCAGATGGCTCCCCCAAGTGTCTGAGCGGCCCCAGAGCTGGACGCTCGTTGCTCG
 CATCTCTGTGTGACACCCAGATGATGGTGACTTTGCCCATGTCAATGTGTCCCTGGAAGGTGGAGGGGCCACTT
 TGCCCTAAGCACCCCAAGACAGCGTCACTATCTGGTGTGTGTGGCTCGGCGGCTGGATCGAGAGGAGGGGATGC
 CTATAACTTGAGGGTTACAGCCACAGACTCAGGCTCACCTCCACTGCGGGCTGAGGCTGCCTTTGTGCTGCACGT
 CACTGATGTCAACGACAATGCACCTGCCTTTGACCGCCAGCTCTACCGACCTGAGCCCCCTGCCTGAGGTTGCGCT
 GCCTGGCAGCTTTGTAGTGCGGGTGACTGCTCGGGATCCTGACCAAGGCACCAATGGTCAGGTCACTTATAGCCT
 AGCCCCCTGGCGCCACACCCACTGGTTCCTCATTGACCCACCTCAGGCATTATCACTACGGCTGCCTCACTGGA
 CTATGAGTTGGAACCTCAGCCACAGCTGATTGTGGTGGCCACAGATGGTGGCCTGCCCCCTTAGCCTCCTCTGC
 CACAGTTAGCGTGGCCCTGCAAGATGTGAATGATAATGAGCCCCAATTCCAGAGGACTTTCTACAATGCCTCACT
 GCCTGAGGGCACCCAGCCTGGAACCTTGCTTCCTGCAGGTGACAGCCACAGACGCGGATAGTGGCCCATTGGCCCT
 CCTCTCCTATTCTTGGGTGCTGGACTTGGGTCTCCGGATCTCCCCCATTCGCAATTGATGCCACAGCGGTGA
 TGTGTGCACAACCCGGACCTGGACCGTGACCAGGGGCCCTCAAGCTTTGACTTCACAGTGACAGCTGTGGATGG
 GGGAGGCCTCAAGTCCATGGTATATGTGAAGGTGTTTCTGTGACAGAGAATGACAACCCCTCCTCAGTTTTATCC
 ACGGGAGTATGCTGCCAGTATAAGTGCCCAGAGTCCACCAGGCACAGCTGTGCTGAGGTTGCGTGCCCATGACCC
 TGACCAGGGATCCCATGGGCGACTCTCCTACCATACTCCTGGCTGGCAACAGCCCCCACTTTTTACCTTGGATGA
 GCAATCAGGGCTGTTGACAGTAGCCTGGCCCTTGGCCAGACGGGGCAATTCTGTGGTGCAGCTGGAGATCGGGGC
 TGAGGACGGAGGTGGCCTACAGGCAGAACCCAGTGCCCGAGTGAGGACATCAGCATTGTGCCTGGAACCCCCACACC
 ACCCATATTTGAGCAACTACAGTATGTTTTTCTGTGCCAGAGGATGTGGCACCAGGCACAGTGTGGGCATAGT
 CCAGGCACACAACCCACCAGGTGCGTTGGCACCTGTGACCCTTTCCCTATCAGGTGGGGATCCCCGAGGACTCTT
 CTCCCTAGATGCGGTATCAGGACTGTTGCAAACTTTCGCCCTCTGGACCGGGAGCTACTGGGACCAGTGTGGGA
 GCTGGAGGTGCGAGCAGGCAGTGGAGTGCCCCAGCTTTCGCTGTAGCTCGGGTGCGTGTGCTGCTGGATGATGT
 GAATGACAACCTCCCTGCCTTTCCTGCACCTGAAGACACGGTATTGCTACCACCAAACACTGCCCCAGGGACTCC
 CATCTATACACTGCGGGCTCTTGACCCCGACTCAGGTGTTAAACAGTCGAGTCACTTTTACCCTGCTTGTGGGGG
 TGGTGGAGCCTTCAAGCTGGAGCCCCACACAGGCCATGTACGGCTTATGAGGCCTCTGGGGCCCTCAGGAGGGCC
 AGCCCCATGAGCTGAGAGCTGGAGGCCCGGATGGGGCTCCCCACACGCACACGCCACTTTCGACTACGGGTGGT
 GGTACAGGATGTGGGAACCCGTGGGCTGGCTCCCCGATTCAACAGCCCTACCTACCGTGTGGACCTGCCCTCAGG
 CACCACTGCTGGAACCTCAGGTCTGTCAAGTGCAGGCCCAAGCACCAGATGGGGGCCCTATCAGCTATCAGCTTGC
 AGCAGAGGGAGCAAGTAGCCCCCTTTGGCCTGGAGCCACAGAGTGGGTGGCTATGGGTGCGGGCAGCACTAGACCG
 TGAGGGCCCAGGAATTGTACATACTGAAGGTAATGGCAGTGTCTGGGTCCAAAGCTGAGTTGGGGCAGCAGACAGG

WO 2004/030615

PCT/US2003/028547

3420/6881
FIGURE 3153B

CACAGCCACCGTGAGGGTCAGCATCCTCAACCAGAATGAACACAGTCCCCGCTTGTCTGAGGATCCACCTTCCT
GGCTGTGGCTGAGAACCAGCCCCAGGGACCAGCGTGGGCCGAGTCTTTGCCACTGACCGAGACTCAGGACCCAA
TGGACGTCTGACCTACAGCCTGCAACAGCTGTCTGAAGACAGCAAGGCCTTCCGCATCCACCCCCAGACTGGAGA
AGTGACCACACTCCAAACCCTGGACCGTGAGCAGCAGAGCAGCTATCAGCTCCTGGTGCAGGTGCAGGATGGAGG
GAGCCCACCCCGCAGCACCACAGGCACTGTGCATGTTGCAGTGCTTGACCTCAACGACAACAGCCCCACGTTCT
GCAGGCTTCAGGAGCTGCTGGTGGGGGCCTCCCTATACAGGTACCAGACCGCGTGCCCTCCAGGAACACTGGTGAC
GACTCTGCAGGCGAAGGATCCAGATGAGGGGGAGAATGGGACCATCTTGTACACGCTAACTGGTCTGGCTCAGA
GCTTTTCTCTCTGCACCCCTCACTCAGGGGAGCTGCTCACTGCAGCTCCCTGATCCGAGCAGAGCGGCCCACTA
TGTGCTGACACTGAGTGCTCATGACCAAGGCAGCCCTCCTCGAAGTGCCAGCCTCCAGCTGCTGGTGCAGGTGCT
TCCCTCAGCTCGCTTGGCCGAGCCGCCCCAGATCTCGCAGAGCGGGACCCAGCGGCACCTGCTGCTGCT
GACGGTGACAGCAGCTGAGGGACTGCGGCCCGGCTCTCTGTTGGGCTCGGTGGCAGCGCCAGAGCCCGGGTGT
GGGTGCACTACCTACACACTGGTGGCGGTGCCGATCCCGAGGGCACCTTCGCGCTGGATGCGGCCGCTCAGGGCG
CTTGTAACCTGGCGCGGCCCTGGACTTCGAAGCTGGCCCGCGTGCGCGCGCTCACGGTACGCGCTGAGGGGCC
GGGAGCGCGGGCGCGCGGCTGCTGCGAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAG
GCGCGACCCGCTGCGCTGCGCTGCGCTGCCAGAGAACCAGGAGCCCGCGCAGCGCTGTACACTTTCCGCGCGCTCGGA
CGCCGACGGCCCCGGCCCCAATAGCGACGTGCGCTACCGCCTGCTGCGCCAGGAGCCCGCCGTGCCGGCGCTTCG
CCTGGACGCGCGCACCCGGGGCGCTCAGCGCTCCGCGCGGCTGGACCGAGAGACCCTCCCGCGCTGCTGCTGCT
GGTGGAAGCCACCGACCGGCCCGCCAACGCCAGCCGCGCTGCTGCGCGCGCTTTAGCGCGCGCTTTCGTCAC
GGATGAGAATGACAACGCGCCTGTCTTCGCTCGCCGTACGCGTGCGCCTCCAGAGGACCAGCGCCTGGGCC
CGCGGCCCTGCACGTGGTAGCCCGGGACCCGGATCTGGGCGAGGCTGCACGCGTGTCTATCGGCTGGCATCTGG
CGGGGACGGCCACTTCCGGCTGCACTCAAGCACTGGAGCGCTGTCCGTGGTGGCGGCCGTTGGACCGCAACAAACG
AGCTGAGCAGCTACTGACAGTGGTGGCCTCAGACCACGGCTCCCCGCGCGCTCGGCCACGCAGGTCTGACCGT
CAGTGTCGCTGACGTCAACGACGAGGCGCCTACTTTCCAGCAGCAGGAGTACAGCGTCTCTTTCGCTGAGAACA
CCCTCCTGGCACATCTCTGCTCACCCTGCGAGCAACCGACCCGACGTGGGGGCCAACGGGCAAGTGACTTATGG
AGGCGTCTCTAGCGAAAGCTTTTCTCTGGATCCTGACACTGGTGTCTCACGACTCTTCGGGCCCTGGATCGAGA
GGAACAGGAGGAGATCAACCTGACAGTGTATGCCAGGACAGGGGCTCACCTCCTCAGTTAACGCATGTCACTGT
TCGAGTGGCTGTGGAGGATGAGAATGACCATGCACCAACCTTTGGGAGTGCCATCTCTCTGAGGTTGCTGTA
GGGCCAGGACCCCGACCCCTTACCATGCTTCGGGCTCTGATCCAGATGTGGGAGCCAATGGGCAGTTGCAGTA
CCGCATCCTAGATGGGGACCCATCAGGAGCCTTTGTCTAGACCTTGCTTCTGGAGAGTTTGGCACCATGCGGCC
ACTAGACAGAGAAGTGGAGCCAGCTTTCCAGCTGAGGATAGAGGCCCGGGATGGAGGCCAGCCAGCTCTCAGTGC
CACGCTGCTTTTGACAGTGACAGTGCTGGATGCCAATGACCATGCTCCAGCCTTTCTGTGCTGCTACTCGGT
GGAGGTGCCGGAGGATGTGCTGCAAGGACCTGCTGCTGCACTACAGGCTCATGACCCTGATGCTGGAGCTAA
TGGCCATGTGACCTACTACCTGGGCGCCGTTACAGCAGGAGCCTTCTGCTGGAGCCAGCTCTGGAGAAGTGC
CACAGCTGCAGCCTTGGACAGAGAAGTGTCCCAGCTACACCTTTTCTGTGAGTGCAAGTGGATGGTGCAGCTGC
TGGGCCCCAAGCACACAGTGTCTGTACCATCACGGTGCAGGATGTCAATGACCATGCACCCACCTTCCCCAC
CAGTCTCTGCGCCTACGTCTGCCCCGCCCAGGCCCGAGCTTCAGTACCCCAACCCTGGCTCTGGCCACACTGAG
AGCTGAAGATCGTGATGCTGGTGCCAATGCTTCCATTCTGTACCGGCTGGCAGGCACACCCTCCTGGCACTAC
TGTGGACTCTTACACTGGTGAATCCGCGTGGCCGCTCTCTGTAGCTCTAGGCCCCGAGATCGTGTCTCTT
CATTGTGGCCACTGATCTTGGCCGTCCAGCTCGCTCTGCCACTGGTGTGATCATTGTGGACTGCAGGGGAAGC
TGAGCGTGGACCCCGCTTTCCCCGGGCTAGCAGTGAGGCTACGATTCGTGAGAATGCGCCCCAGGGACTCCTAT
TGTCTCCCCACGGCCGTCCATGCAGGAGGCACAAATGGACCCATCACCTACAGCATTCTCAGTGGGAATGAGAA
AGGGACATTCTCCATCCAGCCTAGTACAGGTGCCATCACAGTTCGCTCAGCAGAGGGGCTAGACTTCAGAGTGAG
TCCACGGCTGCGACTGGTGTGCAAGGAGAGAGTGGAGGAGCCTTTCCTTCACTGTGCTGACCCTGACCCTGCA
AGATGCCAACGACAATGCTCCCCGTTTCTGCGGCCCAATATGTGGCTTCTTCTGAGTCCCGGCCCTTGGGA
GGGGCCCCCTGCTGCAAGGTGGAGGCGGATGACCTGGATCAAGGCTCTGGAGGACAGATTCTTCTACAGTCTGGCTGC
ATCCAGCCGGCACGTGGATTGTTCCACGTAGACCCAACCAAGGCACTATCACTACCACAGCCATCCTGGACCG
TGAGATCTGGGCTGAAACACGGTTGGTGTGATGGCCACAGACAGAGGGAGCCCGCCCTGGTGGGCTCAGCTAC
CTTGACGGTGTGTTGATCGACACCAATGACAATCGCCCCACCATCCCCCAACCCTGGGAGCTCCGAGTGTGAGA

WO 2004/030615

PCT/US2003/028547

3421/6881
FIGURE 3153C

AGATGCGTTATTGGGCTCAGAGATTGCACAGGTAACAGGGAATGATGTGGACTCAGGACCCGTGCTGTGGTATGT
GCTAAGCCCATCTGGGCCCCAGGATCCCTTCAGTGTTGGCCGCTATGGAGGCCGTGTCTCCCTCACGGGGCCCT
GGACTTTGAGCAGTGTGACCGCTACCAGCTGCAGCTGCTGGCACATGATGGGCCTCATGAGGGCTGTGCCAACCT
CACAGTGCTTGTGGAGGATGTCAATGACAATGCACCTGCCTTCTCACAGAGCCTCTACCAGGTAATGCTGCTTGA
GCACACACCCCCAGGCAGTGCCATTCTCTCCGTCTCTGCCACTGATCGGGACTCAGGTGCCAACGGTCACATTTC
CTACCACCTGGCTTCCCTGCCGATGGCTTCAGTGTTGACCCCAACAATGGGACCCTGTTCACAATAGTGGGAAC
AGTGGCCTTGGGCCATGACGGGTGAGGAGCAGTGGATGTGGTGTGGAAGCACGAGACCACGGGGCTCCAGGCCG
GGCAGCACGAGCCACAGTGCACGTGCAGCTGCAGGACCAGAACGACCACGCCCGAGCTTCACATTGTCACACTA
CCGTGTGGCTGTGACTGAAGACCTGCCCCCTGGCTCCACTCTGCTCACCCTGGAGGCTACAGATGCTGATGGAAG
CCGCAGCCATGCCGCTGTGGACTACAGCATCATCAGTGGCAACTGGGGCCGAGTCTTCAGCTGGAACCCAGGCT
GGCTGAGGCTGGGGAGAGTGCTGGACCAGGCCCCCGGGCACTGGGCTGCCTGGTGTGCTTGAACCTCTAGACTT
TGAAAGCCTGACACAGTACAATCTAACAGTGGCTGCAGCTGACCGTGGGCAGCCACCCCAAAGCTCAGTCGTGCC
AGTCACTGTCACTGTACTAGATGTCAATGACAACCCACCTGTCTTTACCCGAGCATCCTACCGTGTGACAGTACC
TGAAGACACACCTGTTGGAGCTGAGCTGCTGCATGTAGAGGCCTCTGACGCTGACCCCTGGCCCTCATGGCCCTCGT
GCGTTTCACTGTGAGCTCAGGCGACCCATCAGGGCTCTTTGAGCTGGATGAGAGCTCAGGCACCTTGCAGCTGGC
CCATGCCCTGGACTGTGAGACCCAGGCTCGACATCAGCTTGTAGTACAGGCTGCTGACCCTGCTGGTGCACACTT
TGCTTTGGCACCAGTGACAATTGAGGTCCAGGATGTGAATGATCATGGCCAGCCTTCCCACTGAACCTTACTCAG
CACCAGCGTGGCCGAGAATCAGCCTCCAGGCACCTCTCGTGACCCTCTGTCATGCAATCGACGGGGATGCTGGGGC
TTTTGGGAGGCTCCGTTACAGCCTGTTGGAGGCTGGGCCAGGACCTGAGGGCCGTGAGGCATTGCACTGAACAG
CTCAACAGGGGAGTTGCGTGCGGAGTGCCCTTTGACTATGAGCACACAGAAAGCTTCCGGCTGCTGGTGGGTGC
TGCTGATGCTGGGAATCTCTCAGCCTCTGTCACTGTGTCGGTGTAGTACTGGAGAGGATGAGTATGACCCTGT
ATTTCTGGCACCAGCTTTCCACTTCCAAGTGCCCGAAGGTGCCCGGCGTGGCCACAGCTTGGGTACGTGCAGGC
CACAGATGAGGATGGGGGTGCCGATGGCCTGGTTCTGTATTCCCTTGCCACCTCTTCCCCCTATTTTGGTATTAA
CCAGACTACAGGAGCCCTGTACCTGCGGGTGGACAGTGGGCACAGGCAGCGGAACAGCCACCTCTGGGGGTGG
GGGCCGGACCCGGCGGGAAGCACACGGGAGCTGAGGCTGGAGGTGATAGCACGGGGGCTCTGCCTGGTTCCCG
GAGTGCCACAGTGCCTGTGACCGTGGATATCACCCACACCGCACTGGGCCTGGCACCTGACCTCAACCTGCTATT
AGTAGGGGCCGTGGCAGCCTCCTTGGGAGTTGTGGTGGTGTGCTGCACTGGCAGCCCTGGTCTAGGACTTGTTCG
GGCCCGTAGCCGCAAGGCTGAGGCAGCCCTGGCCCAATGTACAGGCAGCACCCCTAGCCAGTGACTCACTGCA
GAAACTGGGCCGGGAGCCACCTAGTCCACCACCTCTGAGCACCTCTATCACCAGACTCTTCCAGCTATGGTGG
GCCAGGAGCTGGAGGACCCTACCCCGTGGTGGCTCCTTGGACCCTTCACTTCAAGTGGCCGAGGATCAGCAGA
GGCTGCAGAGGATGATGAGATCCGATGATCAATGAGTTCCCCCGTGTGGCCAGTGTGGCTCCTCTCTGGCTGC
CCGTGGCCCTGACTCAGGCATCCAGCAGGATGCAGATGGTCTGAGTGACACATCCTGCGAACCACTGCCCTGA
CACCTGGTATAAGGGCCGAAAGGCAGGGCTGCTGCTGCCAGGTGCAGGAGCCACTCTCTACAGAGAGGAGGGGCC
CCCAGCCACTGCCACAGCCTTCCCTGGGGGGCTGTGGCCTGAGCCCTGCACCCACTGGGGACTATGGCTTCCAGC
AGATGGCAAGCCATGTGTGGCAGGTGCGCTGACAGCCATTGTGGCCGGCGAGGAGGAGCTCCGTGGCAGCTATAA
CTGGGACTACCTGCTGAGCTGGTGGCCCTCAGTTCCAACCACTGGCCAGTGTCTTACAGAGATCGCTCGGCTCAA
GGATGAAGCTCGGCCATGTCCCCAGCTCCCCGTATCGACCCACCACCCCTCATCACTGCCGTGGCCACCCAGG
AGCCAAGTCTGTGCCCCCAAGCCAGCAAACACAGCTGCAGCCCGGGCCATCTTCCACCACTTCTCACCGCTC
CCCCATCAGCCATGAAGGCTCCCTGTCTCAGCTGCCATGTCCCCAGCTTCTCACCCCTCTCTGTCTCTCTGGC
TGCTCGCTCACCCGTTGTCTCACCATTGGGGTGGCCAGGGTCCCTCAGCCTCAGCACTCAGCGCAGAGTCTGG
CCTGGAGCCACCTGATGACACGGAGCTGCACATCTAGCTGTGGCCAGGCTGGGCCCCGACCTGGGATGCGCACA
GTGTCCCCAACGCAGGCCCCACTCTGAGCCTGCCCTGGGCAGCCTCGGACTATGACTGGCTACGGGGAGGCCACC
ACCAGGCCCCAGCTCTCCACCCTGAACTCCCCAGCCCCCTCAGAGTACTAGGACCACAGAAGCCCTGTTGCTCAC
TGACCTGTGACCAGGTCCAATGTGGGGAGAAATATGAAGGAGGTAGCAGCCCTGGGTTCTCCTCAGTGAGGGATC
CCTGCCCTGCACCAGCACCTGAGATGGAGCTGAGACTTTATTTATTGGGGGTAGGGGGATGGAGGAGGTCCCTC
CAACATGTTTGGACCCAGCTCCTTTGGGTTCCACTGACACCCCTGCCCTGCCCTGCCAGAACCAAGTGCCAT
TTCTCACTCTGGAGCCTTAATAAACTGCAATTTGT

WO 2004/030615

PCT/US2003/028547

3422/6881
FIGURE 3154

MKAPCPQLPCPPASHPLCLLWLLAHPLSHHLGWPRVPQPQHSAQSLAWSHLMTR SCTSSCGPGWAPTWDAHSVPN
AGPTLSLPWAASDYDWLRGGHHQAPALHPELPSPLRVLGPQKPCCSLTCDQVQCGEKYEGGSSPGFSSVRDPCPA
PAP

WO 2004/030615

PCT/US2003/028547

3423/6881
FIGURE 3155

CTTTTTCGTCTGGGCTGCCAACATGCCATCCAGACTGAGGAAGACCCGGAACTTAGGGGCCACGTGAGCCACGG
CCACGGCCGCATAGGCAAGCACCGGAAGCACCCGGCGGCCGCGGTAATGCTGGTGGTCTGCATCACCACCGGAT
CAACTTCGACAAATACCACCCAGGCTACTTTGGGAAAGTTGGTATGAAGCATTACCACTTAAAGAGGAACCAGAG
CTTCTGCCCAACTGTCAACCTTGACAAATTGTGGACTTTGGTCAGTGAACAGACACGGGTGAATGCTGCTAAAAA
CAAGACTGGGGCTGCTCCCATCATTGATGTGGTGCATCGGGCTACTACAAAGTTCTGGGAAAGGGAAAGCTCCC
AAAGCAGCCTGTCATCGTGAAGGCCAAATTCTTCAGCAGAAGAGCTGAGGAGAAGATTAAGAGTGTGGGGGGGC
CTGTGTCCTGGTGGCTTGAAGCCACATGGAGGGAGTTTCATTAAATGCTAACTACTTTTAAAAA

WO 2004/030615

PCT/US2003/028547

3424/6881
FIGURE 3156

MPSRLRKTRKLRGHVSHGHGRIGKHKRHPGGRGNAGGLHHHRINFDKYHPGYFGKVGMMKHYHLKRNQSFCTVNL
DKLWTLVSEQTRVNAAKNKTGAAP IIDVVRSGYYKVLGKGKLPKQPVIVKAKFFSRRAEEKIKSVGGACVLVA

WO 2004/030615

PCT/US2003/028547

3425/6881
FIGURE 3157A

AAGGCATCCAGGATGCGGTGCGGGGCGGCCCGGTGCCCCCGCCCCGTACGGCAGCCGCGGCGGCCGAGGGGA
CCGGGCCAGGGCCGGGGGCGGCGGCCCGAGCCGCGGTAGCGGCGGCGGGAGGGGCGGCCTGAGGGCGGACGG
GCGGGCGCCCGGGTTGCGGGGGCTCGGTGCCGCTCCGCACTGCCGCGCGGTCTCGGCCCGCGGCCCATGAGTGG
CGGCGGCGGCGGAGGGGGCTCGGCGCCAGTCGCTTCGCCGACTACTTTGTCATCTGCGGACTGGACACGGAGAC
CGGGCTGGAGCCGGACGAGCTGTGCGCATTATGCCAGTACATACAGGCTTCTAAAGCCAGGGATGGTGCCAGCCC
TTTCATTTCAAGTACGACTGAAGGAGAAAATTTTGAAGCAGACACCATTGAGAAGAACATTCAAATCTAAGGTCCT
TGCACGATATCCTGAGAACGTAGAATGGAATCCCTTTGACCAAGATGCAGTAGGAATGCTATGTATGCCGAAAGG
GCTGGCATTCAAGACCCAGGCTGATCCAGGGAGCCCCAATTCCATGCCTTTATTATCACAAGGGAGGATGGCTC
TCGGACATTTGGGTTTGCCCTCACATTTTATGAAGAGGTGACTAGCAAGCAGATCTGCAGTGCAATGCAGACCCT
CTACCACATGCACAATGCTGAGTATGATGTCTACATGCTCCCCCTGCTGATGACAGAGACCAGAGCAGCATGGA
GGATGGTGAAGACACTCCTGTGACCAAATGCAGCGCTTCAACTCCTATGACATTAGCCGGGACACTCTCTACGT
CTCTAAGTGCACTGCGCTCATCACACCCATGTCTTTTATGAAGGCATGTCGGAGCGTGTGAGCAACTCCACCA
GGCAGTCACTTCACCTCAGCCCCCTCCACTGCCCCCTTGAGAGCTACATATACAACGTACTCTACGAGGTGCCGCT
CCCACCTCCTGGCCGGTCTTGAAGTTTCTGGGGTCTATGGGCCAATAATCTGCCAGAGACCAAGTACCAATGA
GCTTCCCCTATTTGACTTTCTGTCAAAGAGGTTTTTGAAGTCTCGGGGTGGAGAATGTGTTTTCAGCTTTTTAC
TTGTGCCCTTCTGGAGTTTCAAATCCTGCTCTACTCACAGCATTACCAGAGACTGATGACTGTGGCGGAGACGAT
TACAGCTCTCATGTTTCTTCCAGTGGCAGCATGTCTATGTCCCTATTCTCCAGCTTCTCTCCTGCATTTCTT
AGATGCTCCTGTTCCATACCTGATGGGTTTGCATTCCAATGGCCTGGATGACCGGTCAAAGCTGGAGCTGCCTCA
AGAGGCTAACCTCTGCTTTGTGGACATTGACAACCACTTCATTGAGTTGCCAGAGGACTTGCCACAGTTCGCCAA
CAAATTGGAGTTTGTCCAGGAAGTCTCTGAGATTCTCATGGCATTGGAATTCCCCCTGAAGGGAATCTTCATTG
CAGTGAGAGTGCCTCCAAGCTGAAGAGGCTGCGGGCCTCTGAGCTTGTCTCGGACAAGAGGAATGGGAACATTGC
TGGCTCCCCTTTGCATTCTACGAGCTTCTTAAGGAGAATGAAACTATTGCCCGGCTGCAAGCCTTGGTCAAGAG
AACTGGGGTGAGCCTGGAAAAGTTGGAAGTGCCTGAAGACCCAGCAGCAATAAGGATCTCAAAGTTTCAGTGTGA
TGAAGAAGAACTCAGGATTTACCAGCTAAACATTGAGATCCGGGAAGTTTTTGCAAATCGTTTTCACTCAGATGTT
TGCAGATTATGAGGTGTTTGTATCCAACCCAGCCAGGATAAGGAATCCTGGTTTTACCAACAGGGAGCAAATGCA
AACTTTTGATAAAGCATCTTTTCTGTGATCAGCCTGAGCCCTACCTGCCCTTCTCTCAAGATTCTTGAGAC
CCAGATGTTTGCATCTTTTATTGACAACAAAATAATGTGTGATGATGATGATAAAGACCCTGTACTCCGGGT
ATTTGATTCCCGAGTTGACAAGATCAGGCTGTTGAATGTTTCGGACACCTACTCTCCGTACATCCATGTACCAGAA
GTGTACCACCTGTGGATGAAGCAGAGAAAAGCAATTGAGCTGCGTCTGGCAAAAATTGACCATACTGCAATTCACCC
ACATTTACTTGACATGAAGATTGGACAAGGGAAAATATGAGCCGGGCTTCTTCCCTAAGCTGCAGTCTGATGACT
TTCCACTGGGCCAGCCAGCAACAAGTGGACGAAAAGGAATGCCCTGCCAGTGGAGGCGGAAAGATCGGCAGAA
GCAGCACACAGAACACCTGCGTTAGATAATGACCAGAGGGAGAAGTACATCCAGGAAGCCAGGACTATGGGCAG
CACTATCCGCCAGCCCAAACCTGTCCAACCTCTCTCCATCAGTGATTGCCAGACCAATTGGAAGTTTGTAGAGGG
CCTGCTGAAGGAATGCCGCAATAAGACCAAGAGGATGCTGGTGGAAAAGATGGGCCGAGAAGCTGTGGAGCTAGG
GCATGGGGAGGTGAACATCACAGGGGTGGAAGAGAACACCCCTGATTGCCAGCCTTTGTGATCTCCTGGAAAGGAT
CTGGAGTCATGGACTACAAGTGAACAGGGGAAAATCAGCCTTATGGTCCCACCTGTTACATTATCAGGACAACCG
GCAGAGAAAACCTCACATCAGGAAGCCTCAGTACCTCAGGAATACTTCTTGATTGAGAACGTAGGAAGTCTGATGC
CAGCTCACTCATGCCTCCCCTGAGGATCTCCCTGATTGAGGATATGAGGCACATCCAGAACATCGGGGAGATCAA
GACTGATGTGGGATAGGCAGAGCATGGGTGCGACATGTATGGAAAAAGTTACTTTTTCAGACACCTGAGCAGCTC
TCTCAGACATGAGCTCACAAAAAGTTATATAAGCGCTATGCCTTCTGCGCTGTGATGACGAGAAGGAGCAGTTC
CTCTATCACCTCCTGTCTTTCAATGCCGTCGATTACTTTTGTCTTACCAATGTCTTACAACTATCCTGATCCCG
TACCACATTTCTGATCGTACCAAGCAAGAAGCTGGGGGGCTCCATGTTCACTGCCAACCCATGGATCTGTATATCA
GGAGAATTGGGTGAGACACAGATCATGCAGATTCACAGGAATGTGCTAGAGATGACCTTCGAGTGCCAGAACTTG
GGGAAGCTTACTACTGTCCAGATTGGCCATGATAACTCTGGGCTGTAATGCAAATGGCTGGTGAGATGTGATG
GTCAGGAATGAGATCACAGGACATACCTACAAGTTCCCGTGTGGCCGGTGGTTAGGGAAGGGCATGGATGATGGA
AGCCTGGAGCGGATCCTAGTTGGGGAGCTGCTCACATCCAGCCTGAGGTGGATGAGAGGCCATGCCGAGCCCGG
CCGCTGCAGCAGTCCCCAGTGTATCCGGAGGCTTGTATACCATCTCACCCAACAACAAGCCCAAGCTGAACACT
GGGCAGATCCAGGAGTCCATCGGGGAGGCAGTCAATGGCATTGTGAAGCACTTCCATAAGCCTGAGAAAGAGCGA

WO 2004/030615

PCT/US2003/028547

3426/6881
FIGURE 3157B

GGCAGTCTGACGCTGTTGCTCTGTGGAGAGTGTGGCCTTGCTCTCGGCCTTGGAACAGGCTTTCCAGCATGGATT
AAATCGCCCCGGCTCTTCAAAAATGTCTTCATTTGGGATTTCTGGAAAAAGCACAAACCTATTATGAGACATTA
GAGAAGAATGAAGTAGTCCCTGAGGAAAACCTGGCATACAAGAGCCCGGAACCTTCTGCCGATTTGTCACTGCAATC
AACAACTACTCCCCGGAACATCGGCAAGGATGGCAAGTTTCAGATGCTGGTGTGCTTGGGAGCCAGAGATCACCTC
CTACACCACTGGATTGCCCTGCTGGCTGACTGCCCCATCACTGCACACATGTATGAGGATGTGGCACTGATCAAA
GACCATACTTGTCAATTCCCTTGATTGCTGTGCTGCAGACATTGCAGGAGTTCAACATCACGCTGGAGACGTCC
CTTGTC AAGGGCATCGACATCTGACCTCCCAGCACCAGCCAGCAGCAGGACTGAGAAAGACTCACCTGCAGCTC
TGACCTTTTTTCCCAAAGGGACTTAAGCGATTGTGCAGGAGTAGGAGACAAAATGTACACTCACTGTAAAAAGAA
AACTAGAGGATTTTTGGAATAAATAATCTATTTTAGAGTTTATTTGCTGATTTGCTTTTTACACACTTTCATGTG
AAAGAGTGATAGGGAGAGGGAGCGAGGCTGGTGCCGCTTATTTTGAAGCTGGTGCCCTCCCTCGCCGTGGCCACA
TGCTGGAACCTGAGGCCTCCCTGGACTGAGCCTGTGCACTGCGTGCGGGACAGTTATGTTTCCTTGCCCCGTGCG
ATTAATGAGGCCCTTCCACATCATTTTTAAACTAATGTTTTCTATATTAACATTATTATGGATATTTGGCTTTC
ATAGGCCACACACAGGTGTGCTGCGCGGGAAGCCCCATGCTCCAATCAAAGGGATTTTTAGTAGTGCCTCTAAGC
AAGCACCAGTGAGTCAGTCCCACGTATTTTCTTTTTTGTGAGTATTGTTTGGGAAGGAGACATGCCGGGATGTGT
CATCGTGCCAAATACCACATTTCCCTGTTGGCACAGTTTCACAGAAGTAAACATAAGCATGTTTTAACAGGTTTTT
CTTTTCTTTTTTCTTTTTTAAATGTTTTATTTATTTAACCCGCCATTGTGTGTTTTTAAGTATTTTCTTTTTTT
AAGGAAAGGAAAAGCTTGTCACAATCTAACTGGCTATGTTATTATTATTAATTTATGTTTTGCAACTTAGAAAC
CAGCTACAGTATGGCCCACTTAATAAAACACCTGAAAC

WO 2004/030615

PCT/US2003/028547

3427/6881
FIGURE 3158

MSGGGGGGSAPSRFADYFVICGLDTETGLEPDELSALCQYIQASKARDGASPFISSTTEGENFEQTPLRRTFKS
KVLARYPENVEWNPFQDAVGMLCMPKGLAFKTOADPREPQFHAFIITREDGSRTFGFALTFYEEVTSKQICSAM
QTLYHMHNAEYDVLHAPPADDRDQSSMEDGEDTPVTKLQRFNSYDISRDTLYVSKCICLITPMSFMKACRSVLEQ
LHQAVTSPQPPPLPLESYIYNVLYEVPLPPPGRSLKFSGVYGPIICQRPSTNELPLFDFPVKEVFELLGVENVFQ
LFTCALLEFQILLYSQHYQRLMTVAETITALMFPFQWQHVVYPILPASLLHFLDAPVPYLMGLHSNGLDDRSKLE
LPQEANLCFVDIDNHFIELPEDLPQFPNKLEFVQEVSEILMAFGIPPEGNLHCSESASKLKRLRASELVSDKRNG
NIAGSPLHSYELLKENETIARLQALVKRTGVSLEKLEVREDPSSNKDLKVQCDEEELRIYQLNIQIREVFANRFT
QMFADYEVFVIQPSQDKESWFTNREQMNFQDKASFLSDQPEPYLPFLSRFLETQMFASFIDNKIMCHDDDDKDPV
LRVFSRVDKIRLLNVRTPTLRTSMYQKCTTVDEAEKAIELRLAKIDHTAIHPHLLDMKIGQGYEPGFFPKLQS
DVLSTGPASNKWTNRNAPAQWRRKDRQKQHTHLRLDNDQREKYIQEARTMGSTIRQPKLSNLSPSVIAQTNWKF
VEGLLKECRNKTKRMLVEKMGREAVELGHGEVNITGVEENTLIASLCDLLERIWSHGLQVKQGSALWSHLLHYQ
DNRQRKLTSGSLSTSGILLDSERRKSDASSLMPPLRISLIQDMRHIQNIGEIKTDVG

WO 2004/030615

PCT/US2003/028547

3428/6881
FIGURE 3159

CGCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCTCTAG
GCCTTTTAGAAAACATGGAGTTGTTCTTTGGCCACATATATGCGAATCTATAAGAAAGCTGATATTGTAGACAT
CAAGGGAATGGGTACTGCTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACAATGT
TACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAAGGTGCG
TATTGAGCACATTAAAGCACICTAAGAGCCGAGATAGCTTCCTGAAACACGTGAAGGAAAATGATCAGAAAAAGAA
AGACGCCAAAGAGAAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTTGTGAG
AACCAACGGGAAGCAGCCTGAGCTGCTGGAACCTATTTCTATGAATTCATGGCATAATAGGTGTTAAAAAAA
AATAAAGGACCTCTGGGCTGTAAAAAAAAAAAAAAAAAATTAAAAAAGAAAAAAAAAAAAAAAAAGAAAAGAAAAAA
AA

WO 2004/030615

PCT/US2003/028547

3429/6881
FIGURE 3160

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKADIVDIKGMGTAQKGMPHKCYHGKTGRVYNVTQHAVGIV
V NKQVKGKILAKRIKVRIEHIKHSKSRDSFLKHVKENDQKKKDAKEKGTWVQLKRQPAPPREAHFVRTNGKQPEL
LEPISYEFMA

WO 2004/030615

PCT/US2003/028547

3430/6881
FIGURE 3161A

CGCGAGGTTGAGGGGCGTCCGAGGCGCGGAGGGGCTGGCTGGGCAGGAGGGGTTGGCGGGGCAGCAGGGCCGCGG
CCATGGGGAGCTTGAAGGAGGAGCTGCTCAAAGCCATCTGGCACGCCTTCACCGCACTCGACCAGGACCACAGCG
GCAAGGTCTCCAAGTCCAGCTCAAGGTCTTTCCCATAACTGTGCACGGTGCTGAAGGTTCTCATGACCCAG
TTGCCCTTGAAGAGCACTTCAGGGATGATGATGAGGGTCCAGTGTCCAACCAGGGCTACATGCCTTATTTAAACA
GGTTCATTTTGGAAAAGGTCCAAGACAACCTTTGACAAGATTGAATTCAATAGGATGTGTTGGACCCTCTGTGTCA
AAAAAAACCTCACAAGAATCCCCTGCTCATTACAGAAGAAGATGCATTTAAAATATGGGTTATTTTCAACTTTT
TATCTGAGGACAAGTATCCATTAATTATTGTGTGAGAAGAGATTGAATACCTGCTTAAGAAGCTTACAGAAGCTA
TGGGAGGAGGTTGGCAGCAAGAACAATTTGAACATTATAAAATCAACTTTGATGACAGTAAAAATGGCCTTTCTG
CATGGGAACCTATTGAGCTTATTGGAAATGGACAGTTTAGCAAAGGCATGGACCGGCAGACTGTGTCTATGGCAA
TTAATGAAGTCTTTAATGAACCTATATTAGATGTGTTAAAGCAGGGTTACATGATGAAAAAGGGCCACAGACGGA
AAACTGGACTGAAAGATGGTTTGTACTAAAACCCAACATAATTTCTTACTATGTGAGTGAGGATCTGAAGGATA
AGAAAGGAGACATTCTTGGATGAAAATTGCTGTGTAGAGTCCTTGCTGACAAAGATGGAAGAAATGCCTTT
TTCTCGTAAAATGTTTTGATAAGACTTTTGAAATCAGTGTTCAGATAAGAAGAAGAAACAGGAGTGATTCAAG
CCATTCACTTACTATTCACTGTGTAAGCTGGGCAGCCCTCCACCACACAAAGAAGCCCGCCAGCGTCGGAAAG
AACTCCGGAAGAAGCAGCTGGCTGAACAAGAGGAAGTGGAGCGACAAATGAAGGAAGTCCAGGCCGCCAACGAAA
GCAAGCAGCAGGAGCTGGAGGCCGTGCGGAAGAACTGGAGGAAGCAGCATCTCGTGACAGAGAAGAGGAAAAGA
AACGCCCTCAGACTCAAGTGAACCTCAGGCCAGGTTACAGCACAGAGCTGGAAAGAGAGAAGCTTATCAGACAGC
AGATGGAAGAAGAGGTTGCTCAAAAGTCTCTGAACTGGAACAGTATTTACAGCGAGTACGGGAGCTGGAAGACA
TGTACCTAAAGCTGCAGGAGGCTCTTGAAGATGAGAGACAGGCCCGGCAAGATGAAGAGACAGTGCAGGAAGCTTC
AGGCCAGGTTGTTGGAGGAAGAGTCTTCCAAGAGGGCTGAACTAGAAAAGTGGCACTTGGAGCAGCAGCAGGCCA
TTCAGACAACCGAGGCGGAGAAGCAGGAGTTGGAGAATCAGCGTGTCTGAAGGAACAGGCCCTGCAGGAGGCCA
TGGAGCAGCTGGAGCAGCTTGAATAGAACGGAAGCAAGCACTTGAGCAGTACGAGGAAGTTAAAAAGAAGCTGG
AGATGGCAACTAATAAGACCAAGAGCTGGAAGGACAAAGTGGCCCCATCATGAAGGATTAATTCGACTGATAGAAC
CAGGTTCAAAGAACCCTCACCTGATCACTAACTGGGGACCTGCAGCTTTCACTGAGGCAGAACTTGAAGAGAGAG
AGAAGAACTGGAAAGAGAAAAAGACCACGGAGTGACTGAGCTTGCTGGCAGTCACGTCAGTTATGTAGATACTGC
ATGGCAGGAGAGCTTTACGCTAAAGACAAAAAGAAACAGCTTTGGGGGCGCGGCGTGGTGGCTCACGCCTGTAATC
CCAGCACTTTGGGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCAAGAGCAGCCTGGCCAACCTGGTGA
AACCTGTCTCTACTAAAAATACAAAAAAATTAGCTGAGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTTGG
GAGGCTGAGGCAGGAGAACTCACTTGAACGTGGGAGGCGGAGGTTGCAGCGAGCTGAGATCATGCCGTTGTACTCC
AGCTTGGGCAACAGAGTGAGACTCCATCTCAAAACAAAACAAAACAAAACAAAAAACCCGGCTTTGCTG
CTTTAACTCTTCTTCTTCTGTGCCTCTCTAAGTGGGTGAGTATCTTAAGGAAGCCTTCTTATTTATCTTCTTG
CAAACAAGGGTTACCTGAAAAAGAAAAAAAGTCAACATTGTCAAGCTGTTTGTCTTCTTTTGAACAT
CACCTTCTGAAATTTGCTTTTAGCTCTCTCAGATTCTTCCCAAATGAGGCAGGGTGCAGACAGCACAGTCAGC
TCTGCAGAGTTTGGAGGGGCTCACTGCCACTGGGTACTCAGAACCTCTGTGGACTGGATGTCAGCTCTTTCTTT
GGCAGCGTGTTCCTTTTCCGAGTATGTGCTGTTAACTAGATTGGCCGGTTTCGCTTTCCATTTCTGACACTTG
ACATGGAATGCCTTTGACCATTTGGTGTCTGACAGAGAAGTCATGGAGTCATTGCCATTTCTGTTGGCCTTTT
GGAATGTGATCCTGTTAGTAGAGGTTTTCTAGCTTCTACTAAGATATTTCTTTCCCTAACCATCATACACTTGGC
ATGTTTCATTCCCATCTCCTTTCCCTCACCTTAAAGGAGACTACCCCTTTGCCCCATATTGTCAACCTAATTTT
CTCTCGTACTCTCTAGTGAATGATGTGCTACCAAGTATATGCCAGGCTGTGAGAGGATTATACTGAGTAGTAG
AAAGAAGCTAATTTGAAATAAAAATTTTGTATAATTAAGAAAGCAGATTAGATGCACATGGTCAACAGGAAGT
TGACTGTATGTCTGCTAGTTAGATTCAAACATCATAAAGATGATAGCATGTCAATATATTAGCCTAGCCATTAT
GTTAGCCTTTGTTAGGTGGGCAGCTTTTCTGCTTTTCCCTTCTCTGTGGTGACAACGGAGGAAATATCCAACA
GAAATACGTCTAACAGGGGAAATTTGGGATCATAGTTTATATGCATCTGATTTGAAAGGAGTATTGAGGAAGGTTT
CATATATGATCTATCTTTGATTAAAAAGAACATTTATGAAATCAAGCCTTCTAACACTAGTTATAATTGAGAAG
CAACAGTAACCTCCGTGGACAGCAATCAAGCTTAAATTTGTAATAAATATGGGGATAATTAGTTGTTGCAAAAA
AAGGGCAGAATTCAGTAGAATAAAGTCTTTTCTCTTACAGGATTAATAATGAGGACAGAGAACCTCAGGTGTTCT
TATGCTAGTGCTTGCTGAGTGCACTAAGAAAGCAATTCCAAATAGATGTATACATCTAGAGAGAGTGGTATTA
GAGATTCAGTGATGTATTTATTTACATGAGAGGAACTGGAATATAATCCCATAAATTATCACCTTTTATGACT

WO 2004/030615

PCT/US2003/028547

3431/6881
FIGURE 3161B

GGAAAATATTTGCCAATGAAGAAATGGTCTGTAGGTATTTGTCTTAAGATTTTTGGCTGTTTAATAAAAAATGTAA
CTTTAACGGTTTCTTATAGTTGCCTTTATAAAGTGATTGTCTAAAATATTTTTGTATCATGTGCCTTTGAAATT
TGACAGCTGATTTGGGTGTTGGATTTCTGCCAGCCATTTATCAGTATTATCATTTTATTTCAGTAGCTGGCAGGT
GTATTAGACCAACGAGACTTAGGTAAGGAATGGAACCTTTCCTGTGGTTTGACTGCACATTACACCAGAAGACTC
CAGTATCCCTCATTCCAGAATGAGGAAAAAGTATTCTACAAAGAACCTAATCACCTCTGTGAAATCTATGGGATG
GAAACAGTGTGGCCTTAGGAGTCAAATAGTCTCTGCATGGTGGGGAGGATCATGATGGAATATGTGAATTTCTAC
TTCTAGAAGTTGTGAAATAGGTCTTGCACCTTTTGAGAATGTCTTCTTTAAACCTGGCTTATTCCACAGCTGTA
GCTGATAACATGACCTGGGGCTTAGCTGCTCTAGCCCTGGGTTCCTGGAGACCTCACACTGCCTGGCCCCCTGGCC
ATCCACCTAAGGACTGCCTGCTTCTGGTCACATGTGGACCTTGATACGACTAAGCGGTTACATATGTGGTTGTG
CAAAAGCTTTCTGTTTAATGCATAGTGTTACCGATTTACATCTTGGTTTTTCAGTGGCACTATGTCTAGGAGGCAA
TATCCTTTTAAACAGTGCTTTGGCTAAGATAGATACTTGTGAATCAAAGATAGCACAGAAATGAACCTAAGTATAT
CCCATTGGAATTATATTTTGATACTATTTAAAATGGTTTCACCTGTTAAAGGGCCAACAGAACTCTTGGTTTTTA
CTTTTGTAATTACTGTACAGAAAATTTCAAGAGTGTTGAGTGCTTGTCATCAGGTGTTTTCTTAATAAGTAGG
GATATGATCATTTACAGGAATTATATATGAAAAAGTTTTTGAAATGTATTTTTGTGATGTGCTATGTTGAGGGG
AAACCAAATATTTATGATTTTAAACATTTCGTATGAAAACATTGTACAATGTAATATGCTCAACTTTCTCAATTT
TTTGCTAATTTTCTAAGATACATTAAAAATGTTTTATTTTTTTTTTAAGTAAAATGGACCCAGTAAGAAAATT
AAAAATACCAGAACATACACTTT

WO 2004/030615

PCT/US2003/028547

3432/6881
FIGURE 3162

MGSLKEELLKAIWHAFTALDQDHSGKVSQSOLKVLSHNLCTVLKVPHPVALEEHFRDDDEGPVSNQGYMPYLN
FILEKVQDNFDKIEFNRMCTLCVKKNLTKNPLLITEEDAFKIWVIFNFLSEDKYPLIIVSEEIEYLLKKLTEAM
GGGWQQEQFEHYKINFDDSKNGLSAWELIELIGNQFSGMDRQTVSMAINEVFNELILDVLKQGYMMKKGHRK
NWTERWFLKPNIIISYYVSEDLKDKKGDILLDENCCVESLPDKDGKKCLFLVKCFDKTFEISASDKKKKQEWIQA
IHSTIHLKLGSPPPHKEARQRRKELRKKQLAEQEELERQMKELOANESKQQELEAVRKKLEEAASRAAEKK
RLQTQVELQARFSTELEREKLIQQMEEQVAQKSSELEQYLQVRLEDMYKLQEALEDERQARQDEETVRKLQ
ARLLEEESKRAELEKWHLEQQQAIQTTEAEKQELNQRVLKEQALQEAMEQLEQLELERKQALEQYEEVKKKLE
MATNKTCSWKDKVAHHEGLIRLIEPGSKNPHLITNWGPAAFTAELEEREKNWKEKKTTE

WO 2004/030615

PCT/US2003/028547

3433/6881
FIGURE 3163A

CAGCAGTGAGTCGGAGCTCTATGGAGGTGGCAGCGGGTACCGAGTGGCGGCTGCAGCAGCGACTCCTCTGAGCTG
AGTTTGAGGCCGTCCCCGACTCCTTCTCCCCCTTCCCTCCCCCTTTTTTTTGTTCGGTTCCTTCCCCCTC
CCTTCCCTATCCCCGACGACCGGATCCTGAGGAGGCAGCTGCGGTGGCAGCTGCTGAGTTCTCGGTGAAGGTATT
TCATTTCTCCTGTCCCCCTCCCCCTCCCCACCCATCTATTAATATTATTCTTTTGAAGATTCTTCGTGTCAAGCC
GCCAAAGTGGAGAGTGCATTGCAGAAGGGGGTGTCTCTCGTTTCAGTGCTTCTTCGGGCGGAGGAGGAAGTAGG
GGTGCACCTCAGCACTATCCCAAGACTGCTGGCAACAGCGAGTTCTTGGGAAAACCCAGGGCAAAACGCTCAG
AAATGGATTCTTGCACGAAGCACTAGACGAGATGACAACCTCCGAGCAAAACAACTCCGCAACGAAAAAGAACGA
CATGATGCAATCTTCAGGAAAGTAAGAGGCATACTAAATAAGCTTACTCCTGAAAAGTTTGACAAGCTATGCCTT
GAGCTCCTCAATGTGGGTGTAGAGTCTAAACTCATCCTTAAAGGGGTCACTGCTGATTGTGGACAAAGCCCTA
GAAGAGCCAAAGTATAGCTCACTGTATGCTCAGCTATGTCTGCGATTGGCAGAAGATGCACCAAACCTTGTATGGC
CCAGCAGCAGAGGGTCAACCAGGACAGAAGCAAAGCACCACATTAGACGCCTCCTAATTTCCAAATTACAAGAT
GAATTTGAAAACCGAACTAGAAATGTTGATGTCTATGATAAGCGTGAAAATCCCCCTCTCCCCGAGGAGGAGGAA
CAGAGAGCCATTGCTAAGATCAAGATGTTGGGAAACATCAAATTCATTGGAGAGCTTGGCAAGCTTGATCTTATT
CACGAATCTATCCTTCATAAGTGCATCAAAACACTTTTGGAAAAGAAGAAGAGAGTCCAACTCAAAGATATGGGA
GAGGATTTGGAGTGCCTCTGTGAGATAATGAGGACAGTGGGACCTAGATTAGACCATGAACGAGCCAAGTCCCTTA
ATGGATCAGTACTTTGCCCCGAATGTGCTCCTTGATGTTAAGTAAGGAATTGCCAGCAAGGATTTCGTTTCTTGCTG
CAGGATACCGTAGAGTTGCGAGAACACCATTTGGGTTCTCGCAAGGCTTTTCTTGACAAATGACCAAAAGACGATC
AATCAAATTCGTCAAGATGCAGTAAAGATCTAGGGGTGTTTATTCTTGCTCCTATGGCTCAAGGGATGAGAAAT
GACTTCTTTCTGGAGGGACCGTTTCATGCCACCCAGGATGAAAATGGATAGGGACCCACTTGGAGGACTTGCTGAT
ATGTTTGGACAAATGCCAGGTAGCGGAATTGGTACTGGTCCAGGAGTTATCCAGGATAGATTTTACCCACCATG
GGACGTATCGTTCAAATCAACTCTTCAATGGCCATGGGGGACACATCATGCCCTCCACACAATCGCAGTTTGGAA
GAGATGGGAGGCAAGTTTATGAAAAGCCAGGGGCTAAGCCAGCTCTACCATAACCAGAGTCAGGGGACTCTTATCC
CAGCTGCAAGGACAGTCGAAGGATATGCCACCTCGGTTTTCTAAGAAAGGACAGCTTAATGCAGATGAGATTAGC
CTGAGGCCTGCTCAGTCGTTTCTAATGAATAAAAATCAAGTGCCAAAGCTTCAGCCCCAGATAACTATGATTCTT
CCTAGTGACAACCACCACGCACTCAAACACCACCTCTGGGACAGACACCTCAGCTTGGTCTCAAAAATAATCCA
CCACTTATCCAGGAAAAGCCTGCCAAGACCAGCAAAAAGCCACCACCGTCAAAGGAAGAACTCCTTAAACTAACT
GAACTGTTGTGACTGAATATCTAAATAGTGGAATGCAATGAGGCTGTCAATGGTGTAAGAGAAATGAGGGCT
CCTAAACACTTTCTTCTGAGATGTTAAGCAAAGTAATCATCTGTCACTAGATAGAAGCGATGAAGATAAAGAA
AAAGCAAGTTCTTTGATCAGTTTACTCAAACAGGAAGGGATAGCCACAAGTGACAACCTTCATGCAGGCTTTCTCTG
AATGTATTGGACAGTGTCCCAAACCTGGAGGTTGACATCCCTTTGGTGAAATCCTATTTAGCACAGTTTGCAGCT
CGTGCCATCATTTTCAGAGCTGGTGAGCATTTCAGAACTAGCTCAACCACTAGAAAAGTGGCACCCATTTTCTCTC
TTCTACTTTTGCTTTCAGCAGTTAGCTAAATTACAAGATCGAGAATGGTTAACAGAACTTTTCAACAAAGCAAG
GTCAATATGCAGAAAATGCTCCCAGAAATTGATCAGAATAAGGACCGCATGTTGGAGATTTTGAAGGAAAGGGA
CTGAGTTTCTTATTTCCACTCCTCAAATTGGAGAAGGAACGTTGAAGCAAATAAAGTTGGATCCATCCCCCTCAA
ACCATATATAAATGGATTAAAGATAACATCTCTCCCAAACCTCATGTAGATAAAGGATTTGTGAACATCTTAATG
ACTAGCTTCTTACAGTACATTTCTAGTGAAGTAAACCCCCCAGCGATGAAACAGATTATCTCTGCTCCTTCC
AAAGAACAGTTAGAGCAGGAAAAACAACACTACTATCTTTCAAGCCAGTAATGCAGAAATTTCTTCATGATCAC
GTTGATCTACAAGTCAGTGCCCTGTATGCTCTCCAGGTGCACTGCTATAACAGCAACTTCCCAAAAGGCATGTTA
CTTCGCTTTTTTGTGCACTTCTATGACATGGAATTTATGAAGAAGAAGCTTCTTGGCTTGGAAAGAAGATATA
ACCCAAGAGTTTCCGGGAAAAGGCAAGGCTTTGTTCAGGTGAATCAGTGCTAACCTGGTTAGAACTGCTGAA
GAAGAAGAATCAGAGGAAGAAGCTGACTAAAGAACCAGCCAAAGCCTTAAATTGTGCAAAACATACTGTTGCTAT
GATGTAAGTGCATTTGACCTAACCACTGCGAAAAATTCATCCGCTGTAATGTTTTACAAATTTTAAAGCAGAAG
CACGTCAGTTAGGATTTCTTCTGCATAAGGTTTTTTGTAGTGAATGTCTTAATCATAGTCTACCATCAAATA
TTTTAGGAGTATCTTAAATGTTTAGATAGTATATTAGCAGCATGCAATAATTACATCATAAGTTCTCAAGCAGAG
GCAGTCTATTGCAAGGACCTTCTTTGCTGCCAGTTATCATAGGCTGTTTTAAGTTAGAAAAGTGAATAGCAACAC
TGAATACGTAGAAATGCACCTTGTCTCAGTAATACTTGAGTTGTTGCAATATTTGATTATCCATTTGGTTGTTAC
AGAAAAATTTCTTAACTGTAATTGATGGTTGTTGCCGTAATAGTATATTGCCTGTATTTCTACCTCTAGTAATGGG
CTTTAAGTGCTAGATTTTAAATATCCTTGAGCCTGGGCAAGTGCAACAAGTCTTTTTTAAAGAAACATGGTTTACTT

WO 2004/030615

PCT/US2003/028547

3434/6881

FIGURE 3163B

GCACAAACTGATCAGTTTTGAGAGATCGTTAATGCCCTTGAAGTGGTTTTGTGGGTGTGAAACAAATGGTGAG
AATTTGAATTGGTCCCTCCTATTATAGTATTGAAATTAAGTCTACTTAATTTATCAAGTCATGTTTCATGCCCTGA
TTTTATATACTTGTATCTATCAATAAACATTGTGATACTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615

PCT/US2003/028547

3435/6881
FIGURE 3164

VE SA I A E G G A S R F S A S S G G G S R G A P Q H Y P K T A G N S E F L G K T P G Q N A Q K W I P A R S T R R D D N S A A N N S A N E K E R H D
A I F R K V R G I L N K L T P E K F D K L C L E L L N V G V E S K L I L K G V I L L I V D K A L E E P K Y S S L Y A Q L C L R L A E D A P N F D G P A
A E G Q P G Q K Q S T T F R R L L I S K L Q D E F E N R T R N V D V Y D K R E N P L L P E E E E Q R A I A K I K M L G N I K F I G E L G K L D L I H E
S I L H K C I K T L L E K K K R V Q L K D M G E D L E C L C Q I M R T V G P R L D H E R A K S L M D Q Y F A R M C S L M L S K E L P A R I R F L L Q D
T V E L R E H H W V P R K A F L D N G P K T I N Q I R Q D A V K D L G V F I P A P M A Q G M R S D F F L E G P F M P P R M K M D R D P L G G L A D M F
G Q M P G S G I G T G P G V I Q D R F S P T M G R H R S N Q L F N G H G G H I M P P T Q S Q F G E M G G K F M K S Q G L S Q L Y H N Q S Q G L L S Q L
Q G Q S K D M P P R F S K K G Q L N A D E I S L R P A Q S F L M N K N Q V P K L Q P Q I T M I P P S A Q P P R T Q T P P L G Q T P Q L G L K T N P P L
I Q E K P A K T S K K P P P S K E E L L K L T E T V V T E Y L N S G N A N E A V N G V R E M R A P K H F L P E M L S K V I I L S L D R S D E D K E K A
S S L I S L L K Q E G I A T S D N F M Q A F L N V L D Q C P K L E V D I P L V K S Y L A Q F A A R A I I S E L V S I S E L A Q P L E S G T H F P L F L
L C L Q Q L A K L Q D R E W L T E L F Q Q S K V N M Q K M L P E I D Q N K D R M L E I L E G K G L S F L F P L L K L E K E L L K Q I K L D P S P Q T I
Y K W I K D N I S P K L H V D K G F V N I L M T S F L Q Y I S S E V N P P S D E T D S S S A P S K E Q L E Q E K Q L L L S F K P V M Q K F L H D H V D
L Q V S A L Y A L Q V H C Y N S N F P K G M L L R F F V H F Y D M E I I E E E A F L A W K E D I T Q E F P G K G K A L F Q V N Q W L T W L E T A E E E
E S E E E A D

WO 2004/030615

PCT/US2003/028547

3436/6881
FIGURE 3165

AGCTCTTTGTTCTCCAAGCAGGAAGGCGGCCTCCTGCCCACCCGCGCCTCCAAGCGGGCCCCCTCCTGCACCAT
AAATCCCCCGGGACTGACAACCGCCTCGCCACGGCCTCCTCTGCTGACAAAAGGGGCAGAAATCATCACTCTCT
CTTTCTCCTCCCCGACGAAGGGCAGCCCCCTGCCGACTCCAGGTCTACACACCTCCCCGCCGGGAGGCCAGGCTCCG
GGACGCCTGCGGTTCCCTGGTCCCGCGCCAACGGCCTGGCCTTCCCTGCCGGCCCGCGTGCCTCCCGCCACGGCG
CTAGCGGTCCGAGCCACGCTCCCTCGCCGTCCGAGCACAGCCGTGCCTCGGTCCGCCACGGCCTCGTCCCTGCAG
GCGTCCGCCATCCGGCCATGACCGCACGGCGGCCTGGCCAACACTGACGTTTTCTTCTACTCCGTGAGCAACAG
GAAGAGAGAACAAGGCAAGACTTTCCAGGTATCTGAAGCGCAGAGGAAATGCTAAAAAGGGTCGCCCCACCC
GGCTCCGCTGCGGCCGCCATTTTGTACCACTCGAGAAGAAGCGACCAGGGACGGCGGCCATTTTAGAGCGCTCC
ACTCGGCGGCGGCAGCGGCTCAACTCACCTTCACCGAGAAGCTCAGCAGCTGCCACCGCAGCTGCCTCCTCAGGAT
CCGGTCGTGCGGGATAGGGAAGGGAGGGGAAAGGGGAACGGAACAAAAAGGGGGAGGGAAAGGGGGAGGAA
GGAGTCGGGGACGGCCTCAAACTCAGCTCAGAGGAGTCGTGCTGCAGCCGCCACTCGGTACCCGCTGCCACCTC
CATAGAGCTCCGACTCACTGCTGGCGCTAAGGCGTGTCTGAAGCCGAACCTATCACTCTTGGGGCAGCCGAACCC
ACCAGAGTCTCCCCGAATGGCTCCTTCGCCGCCCAATCAGCGGCCCGGTTGCCGTCTGCCACCAATCCGCGCAGG
GCAGCGAGGAGGAGCCACAGGGCTGAGCTCGGTTGCGGCGCAGCCCCGCCGAGTGCAGCAAAGCCATATTTCGCGA
AGTCTCTGAGGCTGAGCCAGTGGCGTAAGGGGCGCCGAGCGCTGTCGAGATGAGGGTTGCGTGCGTAAAGCCGGA
GAGCCCTTTTGTGCTGCGTTGGCGTGGCTGCTGCTTCTTGCTCCAGTCCCTTTGTTCACTGAGTCCATATGCCA
TGCTCCAGTTGTATCATCCCTTTTCCCTCGACCTCGTTTTCTCACCAGGGAATATGGGAAGAAAACGCACCCTTA
CCTCCCCGAACCTGTGCGTGGCGAGTGAGCATTGCTTTTTCTTGGCGCCCCCTTGGAGCTGTGGCTGCCCTCGCG
TGCTTGCCCTCTCCCGGGCTGAGCCCTTCGGGTGAGGCGCTGGAGCCCCCGGGCGCAGCGCCGGGACACTACCC
GGCTCCAGGTCTCGGCTTCGGCAGCCTTAGGGAACCCAGAAAGTAGTGGGGAGGAGGCGAGACGTGCGCCCGGA
TGCCAAAGGGGAGCTTCATTCAGCTCCTTATTGGCCCCACCCCTGCAGAGTGAATGAGAAAGTGATGAAAGGAAG
GGGTGATTTTCTTCGAACCGCACAGAAGAAGCTGCTTTTCCCATAGGAATGTCCGGCTGGCGGTCACCGAGGAA
AACACCTGTGTGTCAGACTTCGCGGGGTGTTTGGAGGATTTTGAATTGCTAGCTCCTGTTTTTTTTTTGTTTTT
GTTTGTAAAGTGCACGTTAAACATTGTCAGTTGTGTATTTTCACTTTTAAAGGTTTACCATAAGAAATAGGA
TTAAGCTTTTCAAAGCCGGCAAGTTGAACTATTTATACTTACCAGGTAATGTATTGATGAGTACCTTATTCCATC
GTTTGCACATTGTAGCTATACTAAATGGAGTCATACTTCCATAAACTTAAACAACAAAAATGTCCCCATCTCC
ATTTAACAATGTAGTACTTTTACAGTGTATAGTCAAAGGCAAGAATGTGTGTGTTTTAACAATGAATGACTTTTAA
AGTGTTCAGTAAGAGGCAGGATTTTCAAAGACCCAACTTAACCTTTGATGTGTCAAACAGCTCTTGGTATTAG
AGCACCTGGTCTTAATACAATTTTCCGGAAAAATTGC

WO 2004/030615

PCT/US2003/028547

3437/6881
FIGURE 3166

MRVACVKPESPFE~~S~~ALAWLLLLAPVPLFTESICHAPVVSSPFPSTSF~~S~~HREYGKKTHPYLPRTL~~C~~VASEHCF~~S~~WR
PLELWLPSRAWPLPGLSPSG

WO 2004/030615

PCT/US2003/028547

3438/6881
FIGURE 3167

CGCGAGCCGGGACCACGCCGACCCAGCGTGCCAGGCCGAGGAAAGCGCGGCGGGCAGTCCGAAGACCCACCG
GGACTGAAAGAGAAGGACGAGGTCACTTTCGGACGGGAGGGGCAAGCCAGCCATCCTGGGACCCAGGCGTGCAG
GTTCTCTTTGAGGGTATTCCACCCTGCAAAAAGCATGTATTTCATGGTCAGCTCTCAGCAAGGCCAGTAGCAGAGT
GGTAAAGGCCTTGGCCCTCCAAGGCTGGGAAAAGACAATGACAAGTCAAATCCAGACCTATGTTGTATGTTGGTC
TACTAGGTGACTGTCTCCTGGAAATGTTATGCAGCTCAGCAAGGTGAAGTTTCGAAATCAGTATGACAATGATGT
CACTGTTTGGAGCCCCAGGGCAGGATTCATCAAATTGAATATGCAATGGAAGCTGTTAAACAAGGTTTCAGCCAC
AGTTGGTCTGAAATCAAAAACCTCATGCAGTTTTGGTTGCATTGAAAAGGGCGCAATCAGAGCTTGCAGCTCATCA
GAAAAAATTCTCCATGTTGACAACCATATTGGTATCTCAATTGCGGGGCTTACTGCTGATGCTAGACTGTTATG
TAATTTTATGCGTCAGGAGTGTTTGGATTCCAGATTTGTATTTCGATAGACCACTGCCTGTGTCTCGTCTTGTATC
TCTAATTGGAAGCAAGACCCAGATACCAACACAACGATATGGCCGGAGACCATATGGTGTGGTCTCCTTATTGC
TGTTTATGATGATATGGGCCCTCACATTTTCCAAACCTGTCCATCTGCTAACTATTTTGACTGCAGAGCCATGTC
CATTGGAGCCCGTTCCCAATCAGCTCGTACTTACTTGGAGAGACATATGTCTGAATTTATGGAGTGTAATTTAAA
TGAAGTAGTTAAACATGGTCTGCGTGCCTTAAGAGAGACGCTTCCTGCAGAACAGGACCTGACTACAAAGAATGT
TTCCATTGGAATTGTTGGTAAAGACTTGGAGTTTACAATCTATGATGATGATGATGTGTCTCCATTCCTGGAAGG
TCTTGAAGAAAGACCACAGAGAAAGGCACAGCCTGCTCAACCTGCTGATGAACCTGCAGAAAAGGCTGATGAACC
AATGGAACATTAAGTGATAAGCCAGTCTATATATGTATTATCAAATATGTAAGAATACAGGCACCACATACTGAT
GACAATAATCTATACTTTGAACCAAAAGTTGCAGAGTGGTGAATGCTATGTTTTAGGAATCAG

WO 2004/030615

PCT/US2003/028547

3439/6881
FIGURE 3168

MFRNQYDNDVTWSPQGRIHQIEYAMEAVKQGSATVGLKSKTHAVLVALKRAQSELAAHQKKILHVDNHIGISIA
GLTADARLLCNFMRQECLDSRFVFDRLPVSRLVSLIGSKTQIPTQRYGRRPYGVGLLIAGYDDMGPHIFQTCPS
ANYFDCRAMSIGARSQSARTYLERHMSEFMECNLNELVKHGLRALRETLPAEQDLTTKNV SIGIVGKDLEFTIYD
DDDVSPFLEGLEERPQRKAQPAQPADEPAEKADPEMEH

WO 2004/030615

PCT/US2003/028547

3440/6881
FIGURE 3169

CCTTTCGTTGCCTGATCGCCGCCATCATGGGTCGTATGCGTGCTCCTGAGAAGGGCCTGTCCCAGTCGGCTTTAC
CCTATCGACGCAGCTTCCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTACAACTGGCCA
AGAAGGGCCTTACTCCTTCACAGATCGGTGTAATCGTGAGAGAATCACATGGTGTTCACAAGTACGTTTTGTGA
CAGGCAATCTCTACCATTTAATTAAGAAAGCAGTTGCTGTTCAAAGCATCTTGAGAGGAACAGAAAGGATAAGGA
TGCTAAATTCCATCTGATTCTGATAGAGAGCCAGATTCACCGTTTG

WO 2004/030615

PCT/US2003/028547

3441/6881
FIGURE 3170

CGCCGCCATCATGGGTCGTATGCGTGCTCCTGAGAAGGGCCTGTCCCAGTCGGCTTTACCCATATCGACGCAGCTT
CCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTTACAAACTGGCCAAGAAGGGCCTTACTCC
TTCACAGATCGGTGTAATCGTGAGAGAATCACATGGTGTTCACAAGTACGTTTTGTGACAGGCAATAAAAATTTT
AAGAATTCTTAAGTCTAAGGGACTTGCTCCTGATCTTCCTGAAGATCTCTACCATTTAATTAAGAAAGCAGTTGC
TGTTCAAAGCATCTTGAGAGGAACAGAAAGGATAAGGATGCTAAATTCCATCTGATTCTGATAGAGAGCCAGATT
CACCGTTTGGCTCAATATTATAAGACCAAGCGAGTCCTCCCTCCCAGTTGGAAATATGAATCATCTACAGCCTCT
GCCCTGGTCGCATAAAATTTGTCTGTGTACTCAAGCAATAAAATGATTGTTTAACTAAAATAAAACAAAAACAAA
ACAAAAAA

WO 2004/030615

PCT/US2003/028547

3442/6881
FIGURE 3171

CGCTCTCCTTTTCGTTGCCTGATCGCCGCCATCATCGGTCGCATGCATGCTCCCGGGAAGGGCCTGTCCCAGTCGG
CTTTACCCTATCGACGCAGCGTCCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTACAAAC
TGGCCAAGAAGGGCCTTACTCCTTCACAGATCGGTGTAATCCTGAGAGATTACATGGTGTGCACAAGTACGTT
TTGTGACAGGCAATAAAATTTAAGAATTCTTAAGTCTAAGGGACTTGCTCCTGATCTTCCTGAAGATCTCTACC
ATTTAATTAAGAAAGCAGTTGCTGTTTCGAAAGCATCTTGAGAGGAACAGAAAGGATAAGGATGCTAAATTCCGTC
TGATTCTAATAGAGAGCCGGATTACCGTTTGGCTCGATATTATAAGACCAAGCGAGTCCTCCCTCCCAATTGGA
AATATGAATCATCTACAGCCTCTGCCCTGGTCGCATTAAATTTGTCTGTGTACTCAAGCAATAAAATGATTGTTTA
ACTA

WO 2004/030615

PCT/US2003/028547

3443/6881
FIGURE 3172

MGRMHAPGKGLSQSALPYRRSVPTWLKLTSDDVKEQIYKLAKKGLTPSQIGVILRDSHGVAQVRFVTGNKILRIL
KSKGLAPDLPEDLYHLIKKAVAVRKHLERNRKDKDAKFRLLILIESRIHRLARYYKTKRVLPNWKYESSTASALV
A

WO 2004/030615

PCT/US2003/028547

3444/6881
FIGURE 3173

GGGGAGAGAAGGCCCGGAGGGGCTCTGCGTTCTGTAGTGGCGCTGCTTGGGCCCGTGGCGGATTGTAAGCTGCTG
GTTTTGCGGCTGGGAAGAGCGGCGAGAGGGTTTCGGCATTTCGTCGGGATCCCCGCAAGGATGAGTGTGCCAG
AGAGTCTCACC CGCATGGGGTGAAGCGTTTCAGCCTCCCCAGACGACGATCTGGGATCTAGCAATTGGGAGGCAGC
AGACTTGGGTAAATGAAGAGAGAAAACAAAAGTTCTTGAGACTTATGGGTGCAGGAAAGAAAGAACATACTGGTCG
TCTTGTTATAGGAGATCACAAATCAACATCTCACTTCCGAACCGGGGAAGAAGACAAGAAAATTAATGAAGAACT
GGAGTCTCAATATCAGCAAAGTATGGACAGTAAATTATCAGGAAGATATCGGCGACATTGTGGACTTGGCTTCAG
TGAGGTAGAAGACCATGATGGAGAAGGTGATGTGGCTGGAGATGATGATGATGACGATGATGATTACCTGATCC
TGAAAGTCCAGATGATTCTGAAAGCGATTTCAGAGTCAGAGAAAGAAGAATCTGCTGAAGAACTCCAAGCTGCTGA
GCACCCTGATGAAGTGGAGGATCCCCAAAACAAAAAGATGCAAAAAGCAATTATAAAATGATGTTTGTTAAATC
CAGTGGTTCTAACTCCCAAACGCTTAGTCTTTGTATTAAAAGTAAGCCTTATTGTTACAATGCACAGTGGAGGA
CTGCTTATAGAGCACAGACCTTTGTATTATAATTTTAAAAAGGCCCTTTTAAATAATTACAAAGAGTGTGTGCT
TTCAAATGCCATGGGTTACACTTTTATGGGCATGACTATAACCATTTTGTAAAGAGTAAGAGTTGTATAAAATA
AGAAATAAATACAGTACTCAACTTCCTTTTCATATTAGCATCATCAACCCTCTAATTCACCTTATGGGGGAAATGC
TTCTTTTGTGTTGTGATAGCTATTTTATCATTTCTTCATATTTTCTCTTATAAAAATGTATTTGATACTGTGA
TATGTTACGAAAAGTATTCTTTAATTATTCTTTGTTATAGTAGAGCTGTTTATTATGGATATTTCTGCTGCCAG
TCACAATCTAAATTAATTTTGGCAAAAGATTGGGTACTTAGTTGCCTGTTACTGAGTTAGCTCTACTCTTTTGA
CCAAAGCAACATGAGAGCAAGTACTTTTCACACTTGTTAAGATGGAGTTATACTGTCATACATTTGGAATATTA
TGATCCCAAGTAGTCTTTTATAATTTGGATTGTATCGTATGTTAGATTTTGTATAAAATTTGGCCAATTTTAC
AGAAGAAATTCCTGATCATTAGTTCTATCTATTTAGAAATATGTAAACTGGATTTTTTTTTTAAGTAATATGT
GACCAAAGTTAATTTTGTCCCAAAGGTCTAAATAAAGAGCAGTTTCCACAAAAA
AAAA

WO 2004/030615

PCT/US2003/028547

3445/6881
FIGURE 3174

MSAARESHPHGVKRSASPDDDLGSSNWEAADLGNEERKQKFLRLMGAGKKEHTGRLVIGDHKSTSHFRTGEEDKK
INEELESQYQQSMDSKLSGRYRRHCGLGFSEVEDHDGEGDVAGDDDDDDDDSPDPESPDDSESDSESEKEESAEE
LQAAEHPDEVEDPKNKKDAKSNYKMMFVKSSGS

WO 2004/030615

PCT/US2003/028547

3446/6881
FIGURE 3175

TGCTGCAGCCGCTGCCGCCGATTCCGGATCTCATTGCCACGCGCCCCGACGACCGCCCGACGTGCATTCCCCGAT
TCCTTTTGGTTCCAAGTCCAATATGGCAACTCTAAAGGATCAGCTGATTATAATCTTCTAAAGGAAGAACAGAC
CCCCAGAATAAGATTACAGTTGTTGGGGTTGGTGCTGTTGGCATGGCCTGTGCCATCAGTATCTTAATGAAGGA
CTTGGCAGATGAAC TTGCTCTTGTGATGTCATCGAAGACAAATTGAAGGGAGAGATGATGGATCTCCAACATGG
CAGCCTTTTCTTAGAACACCAAAGATTGTCTCTGGCAAAGACTATAATGTAAGTGCAAACTCCAAGCTGGTCAT
TATCACGGCTGGGGCACGTCAGCAAGAGGGAGAAAGCCGTCTTAATTGGTCCAGCGTAACGTGAACATAATTTAA
ATTTCATCATTCCTAATGTTGTAAAATACAGCCCGAAGTGAAGTTGCTTATTGTTTCAAATCCAGTGGATATCTT
GACCTACGTGGCTTGGAAGATAAGTGGTTTTCCCAAAAACCGTGTTATTGGAAGTGGTTGCAATCTGGATTACAGC
CCGATTCCGTTACCTGATGGGGGAAAGGCTGGGAGTTCACCCATTAAAGCTGTCATGGGTGGGTCTTGGGGAAACA
TGGAGATTCCAGTGTGCTGTATGGAGTGGAAATGAATGTTGCTGGTGTCTCTGAAGACTCTGCACCCAGATTT
AGGGACTGATAAAGATAAGGAACAGTGGAAAGAGGTTACACAAGCAGGTGGTTGAGAGTGCTTATGAGGTGATCAA
ACTCAAAGGCTACACATCCTGGGCTATTGGACTCTCTGTAGCAGATTGGCAGAGAGTATAATGAAGAATCTTAG
GCGGGTGCACCCAGTTTCCACCATGATTAAGGGTCTTTACGGAATAAAGGATGATGCTTCCTTAGTGTTCTTG
CATTTTGGGACAGAATGGAATCTCAGACCTTGTGAAGGTGACTCTGACTTCTGAGGAAGAGGCCCGTTTGAAGAA
GAGTGCAGATACACTTTGGGGGATCCAAAAGGAGCTGCAATTTTAAAGTCTTCTGATGTCATATCATTTCACTGT
CTAGGCTACAACAGGATTCTAGGTGGAGGTTGTGCATGTTGTCCTTTTATCTGATCTGTGATTAAAGCAGTAAT
ATTTTAAGATGGACTGGGAAAAACATCAACTCCTGAAGTTAGAAATAAGAATGGTTTGTAATAATCCACAGCTATA
TCCTGATGCTGGATGGTATTAATCTTGTGTAGTCTTCAACTGGTTAGTGTGAAATAGTCTGCCACCTCTGACGC
ACCACTGCCAATGCTGTACGTACTGCATTTGCCCTTGAGCCAGGTGGATGTTACCGTGTGTTATATAACTTCC
TGGCTCCTTCACTGAACATGCC TAGTCCAACATTTTTTCCAGTGAGTCACATCCTGGGATCCAGTGTATAAATC
CAATATCATGTCTTGTGCATAATTCTTCCAAAGGATCTTATTTGTGAAGTATATCAGTAGTGACATTACCATA
TAATGTAAAAAGATCTACATACAAACAATGCAACCAACTATCCAAGTGTTATACCAACTAAAACCCCCAATAAAC
CTTGAACAGTG